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Latest "Gimme" Gimmick

Representatives of medicine in Texas are doing a magnificent job in combating the trend toward socialized medicine. Because of that fact, I want to cite certain developments which should be of interest to members of the Texas Medical Association.

While physicians are fighting attempts to get socialized medicine by means of providing medical care to the aged through the social security system, the social planners in Washington are working in another direction to nullify their efforts.

In 1956, Congress amended the Social Security Act to provide benefits to totally and permanently disabled persons over 50 years of age on the social security rolls. To qualify, a person had to be disabled for at least six months and had to have a prognosis of a long and indeterminable disability. In this Act, it was provided that workmen's compensation benefits for work-connected disability would be an offset to social security benefits.

In 1958, without public hearings on the subject, the "offset provision" was removed. Since then, totally and permanently disabled persons with work-connected disability have been drawing two benefits—one from the state and one from the federal government. In about 30 states, the combined benefits equal or exceed the income these persons received before disability.

Two years later, in 1960, the age limit of 50 years was removed, making these benefits applicable to all ages.

During the 1961 Congressional session, the House Ways and Means Committee considered a provision which would change the definition of total and permanent disability to include anyone whose disability lasts

longer than six months. Although this provision was not included in the bill recently passed, it is likely to be reintroduced next session. There is a strong possibility that it may receive favorable action by the committee then.

The blueprint for the future seems to be something like this: If the provisions can be extended to include temporary total disability for periods longer than six months, the next step would be to remove the six months' waiting period, thereby providing benefits for all temporary disability. Having provided disability benefits to this extent, proponents logically would then press for the inclusion of medical benefits.

There is a strong possibility that if the federal government invades this field, the states will begin to abdicate their responsibilities, particularly since duplication of benefits will exist. When this potential duplication was pointed out to members of the committee, their reaction seemed to be that if any inequities exist, the states should adjust their benefits downward, rather than for the federal government to give way.

If duplication of disability benefits becomes more extensive through the amendments that I have previously mentioned are possible, employers probably will tend not to resist too strongly. The reason: Workmen's compensation insurance is a burden borne entirely by them, whereas social security costs are shared equally with the employee.

Thus, even if physicians are able to stave off the inclusion of medical care to the aged through the social security system, it will be almost humanly impossible to get Congress to reverse the trend if my predictions are correct. An argument that state officials have not been responsive to economic changes in wage levels and have not increased workmen's compensation benefits accordingly, unfortunately, is true. In Texas, the benefits have not kept pace with the increased level of wages. It is a ticklish situation for personnel of workmen's compensation insurance companies to handle. They can hardly afford to urge policyholders to pay more for workmen's compensation insurance.

As chairman of the Insurance Committee of the U. S. Chamber of Commerce, I am acquainting representatives of industry and officials of chambers of commerce in the various states with this situation. I hope that sufficient interest can be aroused to oppose this development in the trend toward a welfare state.

—BEN H. MITCHELL, President,
Texas Employers' Insurance Association,
Dallas, Texas.

Tools Without Manpower

"Now that you folks know how, why don't you stamp out tuberculosis?" someone recently asked me.

I consider the question pertinent and reasonable. The answer, however, is not simple: "We" do know how to "stamp out" tuberculosis but we have to stamp it out of *people,* and that complicates the situation. While any program designed to eradicate tuberculosis necessarily involves several forces besides the patient, it must revolve around him.

Therefore the first step is to discover the patient at the earliest possible moment, which requires an excellent case-detection program. Such a program should include skin-testing, and roentgenographic and laboratory studies when indicated. Private practitioners of medicine and agencies which form a part of the tuberculosis team should obtain the program policy on case detection issued by the State Department of Health. Any necessary revisions of this policy should be put in writing so that the whole "team" will know what is being attempted. This detection program must be augmented as rapidly as money and personnel are made available.

The so-called selective "mass surveys" are

made by the State Department of Health in conjunction with local health units and county medical societies. The best and biggest case detection program, however, is one conducted by the private physician—though it is not an organized project. The Texas Medical Association and the specialty medical organizations in the state should furnish leadership here. Official statements of policy in a tuberculosis program should be sent to physicians in private practice to encourage them to look for tuberculosis. The health department's written policy presents information concerning "mass surveys". Similar statements to practicing physicians should outline a program to uncover tuberculosis infections among their private patients. With proper direction there is no reason that these two programs should not work together so that all cases of tuberculosis can be found.

In the treatment phase of a tuberculosis eradication program, two disturbing facts are apparent: many cases of tuberculosis are not known and many that are found are not in the earlier stages of the disease. The blame for this deplorable situation must be shared by the citizens of our communities. The tools for finding and treating all persons with tuberculosis are available, but they must be used and citizens must *insist* that they be used. At present our state has adequate and efficient facilities for the treatment of tuberculous patients sent to its institutions. Those treated at home should have as competent care.

Care of the medically indigent patient just discharged from the hospital is another problem. Legally, the control of communicable disease is a responsibility of the Department of Health, which by written policy must use every means available to supervise these patients. Other agents such as local physicians, nurses, and social workers should aid in this service. Patients can be discharged or furloughed to individual physicians or official agencies who will be responsible to the State Department of Health for their continued treatment. Local agencies such as city and county governments should furnish funds to help care for these patients. When it is feasible, the Department and the state hospitals should coordinate a program to supervise them. Perhaps hospital personnel can furnish drugs, interpret roentgenograms, and examine sputum. The Health Department can make the roentgenograms and furnish nurses to take patients in for examination.

The Tuberculosis Committees of the Texas Medical Association, the Texas Thoracic Society, and the Texas Chapter of the American College of Chest Physicians can furnish consultative services to the official agencies on tuberculosis. The Texas Tuberculosis Association can coordinate the widespread educational program which is necessary to inform every citizen and the governmental agencies of the urgency of the problem.

Tuberculosis can be eradicated if corrective steps are taken before drug-resistant germs infect too many people. Until Texas citizens are willing to do their part in such a program, we shall continue to have tuberculosis. I enter a plea to medical and social leaders in our state to adopt and implement a program that will rid us of this killer.

—ELLIOTT MENDENHALL, M.D.,
Dallas, Texas.

Poison Control Centers

Three years ago there were seven Poison Control Centers in Texas. Now there are twenty, and almost every major population area in Texas is serviced by a center.

Each center has been provided with a card index file by the National Clearinghouse for Poison Control Centers which, when augmented by a modest reference library, can provide a physician with pertinent information on approximately 25,000 household products.

When a physician calls the center he is provided exact knowledge of the ingredients of the commercial products along with data on toxicity, symptoms, and treatment. This in-

formation will permit more exact treatment for cases of ingestion of household products.

All Poison Control Centers are available 24 hours a day to give information to physicians. Many also provide treatment on the same basis. All centers are under the directorship of physicians who are dedicated and give much of their time and energy to provide a service to physicians and the community. A list of Poison Control Centers in Texas is printed on pages 788-789.

—J. E. PEAVY, M.D., Austin,
Commissioner of Health, Texas
State Department of Health.

Each Physician's Responsibility

The Council on Medical Jurisprudence and the House of Delegates of the Texas Medical Association voted during the recent Annual Session to oppose a bill in the State Legislature requiring all physicians or other persons treating infants to do a urine test for phenylketonuria between the ages of 3 weeks and 3 months. Why were they opposed to the bill? Not that this is an unsafe, difficult, or contraindicated test. Nor is it because any physician, or any person for that matter, would condone neglect that might doom an infant to a lifetime of irreversible mental deficiency. It is simply that no legislative body could ever keep current the essential statutes embodying all the principles of diagnosis and treatment of patients. Furthermore, such a Herculean effort would not accomplish the intended result. The physician has accepted the responsibility of being informed, of keeping abreast of new advances, and of exercising good judgment in carrying out all appropriate tests and treatment for each patient. This is true for phenylketonuria as well as galactosemia, "maple syrup urine disease," and many other diseases. The highest quality of medical care for each person is attained only if the decisions continue to be those of the physician. He must be imbued with this full measure of responsibility. No other system will yield as much for the patient.

Phenylketonuria is the result of an inborn error of metabolism. It does not occur frequently, although Woolf estimated that in England 20 to 40 affected infants are born each year. Waites found 21 cases of phenylketonuria in a survey of most of the institutions and training schools for the mentally retarded in the State of Oklahoma. The absence of the enzyme phenylalanine hydroxylase in the liver permits an abnormally high level of the amino acid, phenylalanine, to accumulate in the serum. This probably results in failure of development of the brain. If the abnormality is not detected early, by the first month or soon thereafter, subsequent treatment will not prevent some mental retardation.

Routine testing of the urine with 10 per cent ferric chloride solution or Phenistix at 3 or 4 weeks of age, and again at 2 months of age, is ideal, since phenylalanine and other abnormal metabolites do not always appear in sufficient quantity to be detected until after 1 month of age. If there are other cases in the family, the serum of each newborn infant should be tested for an elevated phenylalanine level by chromatography at a few days of age.

To prevent mental retardation, treatment must be begun early, preferably before 1 month of age; however, treatment begun later may prevent further failure of development of the brain. Commercially available products facilitate preparation of acceptable diets low in phenylalanine. Patients receiving this diet require strict medical supervision.

The key to prevention of mental retardation is early detection and proper management. *This is each physician's responsibility.*

—FLOYD A. NORMAN, M.D.,
Dallas, Texas.

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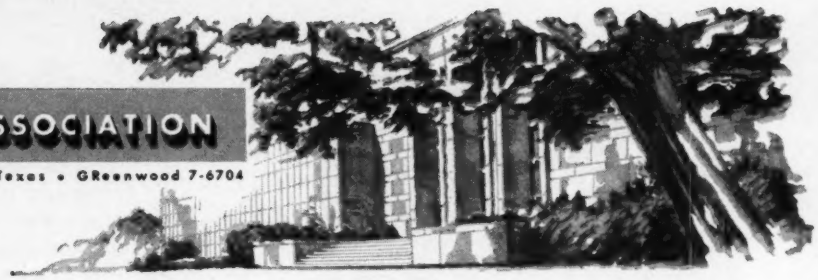

Our Stand on PKU

You will recall that the Texas Medical Association opposed mandatory legislative regulation of the mass ferric chloride diaper test for phenylketonuria (PKU) because every doctor assumes his responsibility in detecting this and other inborn errors of metabolism, such as galactosemia.

Some cardinal features which should arouse suspicion of PKU in a newborn infant are:

1. Positive family history.
2. Irritability, vomiting, and feeding problems.
3. Blond hair and skin.
4. Infantile eczema.
5. Peculiar musty odor of skin and urine.
6. Convulsions.
7. Retardation of mental and physical development.

These observations frequently are not manifested until after a considerable amount of damage has been done to the brain by the phenylalanine in the child's serum. An effort should be made to establish a diagnosis during the first month of life so that early treatment can be instituted. Serious consequences may thus be averted. The simple 10 per cent ferric chloride test—one drop to a wet diaper—is probably the most efficient screening mechanism. This should be performed routinely when babies are between three and four weeks of age, then again when they are two months old. With a negative result (test solution stays yellow and does not turn dark green), the parents can be assured that the child does not have phenylketonuria. To substantiate a positive diaper test result, a serum phenylalanine test is run. The normal level is 1-3 mg. per 100 cc., whereas most patients who are untreated will have a 20-60 mg. content of phenylalanine in the blood.

Harvey Renger, M.D.
President, Texas Medical Association

A Texas physician goes back to school.

Each a Part of the Whole

Today the magnificent development of the medical profession is evident. Also evident is the fact that the profession is in a state of healthy wholeness. Being a Texan, the writer can express himself only as a Texan, but he hopes that what is true in this state exists across the nation. He would like to use himself as a case in point to express the concept of the "wholeness of the profession".

A number of years ago he joined the American Academy of General Practice. This organization has provided the mechanism for that most important doctor of all, the physician in general practice, to be the life-long scholar that he should. Development of this ideal physician, of course, is the concern of the "whole profession".

"Organized medicine"—so often wrongly damned by physicians as being composed of "Those politicians who want to run things"—is comprised, in the main, of intelligent, non-self-seeking men. They work together for the common good of all people, not just for physicians. The American Medical Association is, in fact, one of the few bastions of freedom evident upon the political and economic scene.

This the writer learned when he was sent by his local medical society to the Texas Medical Association House of Delegates. Then when he was appointed to membership on the state association's Committee for the American Medical Education Foundation, later serving as its chairman, he attempted to contribute to the solution of some of the problems of medical education. As so often is true, however, he received much more in benefits than he gave. One of the greatest gains has been that of personal acquaintance with many fine people—male, female, professional, and laymen—not only in Texas but across the nation.

In October, 1960, he decided to specialize. That a period of study was necessary was evident, but how could this be accomplished? As a result of doing AMEF work at TMA headquarters, he happened to meet a superior physician who was looking for a location to practice. The writer was thus enabled to take a leave of absence.

Where to go? At a meeting of the American Cancer Society executive committee in Austin that same month, he discussed this with Dr. R. Lee Clark, Jr., Director of the University of Texas M. D. Anderson Hospital and Tumor Institute, Houston, who suggested the Texas Medical Center as a possibility. Later Dr. Jerry Miller of Dallas gave further encouragement, as did Dr. A. J. Gill, Dean of Southwestern Medical School. It was learned from Dr. Gill that an old friend, Dr. Grant Taylor, Dean of the University of Texas Postgraduate School of Medicine, Houston, had available exactly what was needed. Within less than a week, the whole matter was settled. Enrollment was accomplished and a house was rented. A well planned year of postgraduate study at the Texas Medical Center was begun in January, 1961.

It is evident that the individual practitioner, the Texas Medical Association, the American Academy

of General Practice, the medical schools, the hospitals, all of the medical specialties—are not entities apart. Each is a section of a living organism, within which the medical practitioner may move about for the benefit of himself and others, if he chooses.

Having become a postgraduate student at the age of 48, the writer finds himself able to learn well for the first time. What an explosive expansion medicine is undergoing! What wonderful teaching is being given to the undergraduate and postgraduate student! How could one who knows relatively so little practice medicine? What a fine thing to be able to walk into any of the multifarious and marvelous teaching facilities available—to find oneself received with interest, friendship, and concern that it be possible to learn!

I would recommend highly to all physicians that they be active in organized medicine for their benefit and that of many others, and that they take advantage of postgraduate education to participate in the explosive expansion of the medical profession.

—D. J. SIBLEY, JR., M.D.,
Houston, Texas.

Homicide Rates Highest Among Non-white Males

Homicide takes more than 8,000 lives a year in the United States, according to Metropolitan Life Insurance Company statisticians, and more than half of the victims are slain by firearms. One in four is killed by a cutting or piercing instrument.

The homicide rate among non-white males is 10 times that among white males. "The relative frequency of homicide is highest in the South, lowest in the North, while the West is in an intermediate position. In 1958, the rate ranged from 1.1 per 100,000 population in New England to 8.8 in the East South Central area," the statisticians note.

Records for individual states are even more striking. Five states—New Hampshire, Rhode Island, Massachusetts, North Dakota, and South Dakota—recorded homicide rates of less than 1.0 per 100,000, New Hampshire having the lowest rate of 0.3. Three southern states, however, had rates exceeding 10.0 per 100,000: Alabama (11.4), Florida (10.7), and Georgia (10.4).

Voluntary Hospitals on Increase

A considerable increase has been noted in the number of voluntary, or nonprofit hospitals during the past 15 years, while privately owned, or proprietary, hospitals have decreased more than 17 per cent. The number of hospitals sponsored by state and local governments has increased 55 per cent since 1946.

Patterns of Disease, a monthly publication of Parke, Davis & Company, recently reported the figures. As of January 1, 1961, there were reported 1,378-035 hospital beds in the United States, exclusive of those in federal facilities, or 7.5 beds per 1,000 population. The Public Health Service has estimated a national goal of 9.5 beds per 1,000 population by 1970.

The District of Columbia has the highest number of hospital beds per 1,000 population—17.8, followed by 14.0 in New York and 13.2 in Massachusetts.

"Despite the over-all increase in the number of hospital beds since 1950, the number of acceptable beds comprises only 58.2 per cent of the number needed," the publication noted.

The greatest shortage appears to be in chronic disease hospitals, whereas of January 1, 1961, acceptable beds totaled only 16.7 per cent of the number needed.

The publication points out, however, that existing facilities are not always fully utilized. "On a typical day in 1960, one of four beds in nonfederal general hospitals was empty."

OSTEOPOROSIS Diagnosis and Treatment

Gilbert S. Gordan, M.D.

OSTEOPOROSIS is the most common of metabolic bone diseases. Urist has shown that 26 per cent of women past the age of 60 have osteoporosis severe enough to have vertebral fractures with little or no trauma.[14] The condition is of great clinical importance because it often produces severe difficulty, may be symptomatic of a more serious underlying condition, and is often mimicked by other diseases. At the outset it is important to agree on definitions. Osteoporosis signifies simply too little bone. It should not be confused with other conditions which cause radiolucency. Marcellus Donatus referred to this condition as early as 1588[5]—long before Roentgen's discovery of the x-ray. It is so named because the bones become porous as the trabeculae dwindle. Fig. 1 shows the iliac crest biopsy of a normal person and of a subject with osteoporosis. The osteoporotic bone has fewer and thinner trabeculae. In this particular section, the cortex appears normal.

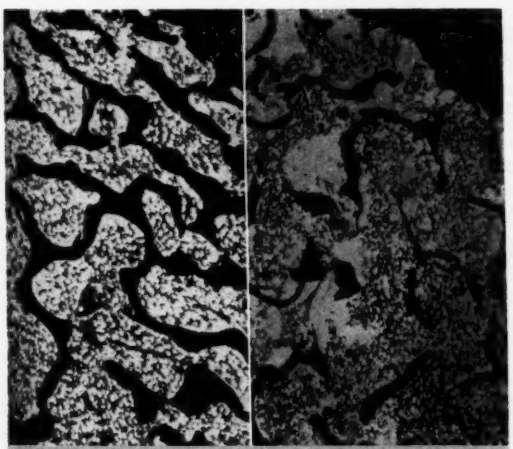

Fig. 1. Iliac crest biopsy specimen of normal (L) and osteoporotic (R) bone. Note decreased number and size of trabeculae in osteoporosis.

Causes

There are three common causes of osteoporosis: immobilization, hypogonadism, and excess of catabolic hormones (Table 1). Immobilization deserves special mention. If a single extremity is placed in a cast, the stress and strain stimulus to bone formation is lost and atrophy of disuse—osteoporosis—results. If the entire patient is immobilized, generalized osteoporosis results. It is apparent that the stress and strain stimulus to osteoblast formation is an important homeostatic means of maintaining skeletal integrity.

The osteoporosis of hypogonadism is a more controversial subject. The most common example of this condition is the woman 10 or more years past spontaneous menopause. The reason for controversy is that postmenopausal woman may, in fact, have a complication of senility rather than of gonadal deficit. Albright pointed out that congenital hypogonadism is regularly associated with severe osteoporosis.[1] The example he chose was ovarian agenesis (now called gonadal dysgenesis or Turner's syndrome). This may not be a pertinent example since Turner's syndrome is associated with many congenital anomalies and osteoporosis may be one of these. I believe hypogonadism is an important cause of osteoporosis because young eunuchoid women also have this complication, and it occurs much more rapidly after

Diagnosis of osteoporosis requires a combination of clinical, chemical, and roentgen examination. Good therapeutic results necessitate adequate treatment of any specific cause detected, as for example, removal of an adrenal cortical tumor or correction of thyrotoxicosis.

menopause produced by surgical or roentgen therapy. In our clinic, where there have been more than 200 cases of postmenopausal osteoporosis, only once has this condition been seen in less than ten years after spontaneous menopause, whereas it frequently occurs in as little as three years after an artificially induced menopause. The more complete removal or more abrupt removal of sex hormones may explain the earlier onset after castration. Excess of the catabolic hormones of the adrenal cortex or thyroid gland also cause osteoporosis. The mechanism by which osteoporosis is produced in these two conditions is different from that of the postmenopausal state. Cushing's disease was formerly a rare cause of osteoporosis, although osteoporosis is extremely frequent in Cushing's disease. The point here is that *spontaneous Cushing's* disease is a rare condition. Since cortisone was introduced for the treatment of rheumatoid arthritis and other conditions in 1949, however, iatrogenic Cushing's disease has become common and osteoporosis and vertebral fractures from this cause extremely frequent. Administration of cortisone, hydrocortisone, prednisone, prednisolone, methylprednisolone, triamcinolone, dexamethasone — in short, every corticoid we have tested—rapidly produces calcium wasting, and all of these compounds cause clinical osteoporosis.

The osteoporosis of hyperthyroidism deserves particular attention. It was first described by Williams and Morgan in elderly women;[16] it, therefore, seemed possible that the postmenopausal state was responsible rather than the thyrotoxicosis. It now is known, however, that the osteoporosis of thyrotoxicosis involves bones which are not radiologically abnormal in the ordinary postmenopausal osteoporosis and causes intense resorption of bone, which can be detected by histologic means or by measuring the rate of turnover of bone-seeking minerals. Furthermore, the condition frequently responds to treatment of thyrotoxicosis alone.

The three common causes of osteoporosis are so readily understandable that the fact that rarer types of osteoporosis are at present poorly understood may be overlooked. Fragilitas ossium (osteogenesis imperfecta) is a congenital osteoporosis of variable severity. In the worst cases, it is not consistent with fetal survival. In milder cases, it tends to improve at puberty and to recur at the menopause. It also may respond to administration of sex hormones. Salter and Aub interpreted osteoporosis of scurvy as evidence of need for vitamin C to form bone matrix.[12] It seems equally possible that painful subperiosteal hemorrhages cause sufficient immobilization to produce osteoporosis. The bone lesions of biliary cirrhosis can represent either osteoporosis or osteomalacia. In biliary cirrhosis, chemical tests suggest the diagnosis of osteomalacia: The serum calcium level is often low because of hypoalbuminemia, and the alkaline phosphatase level is elevated by hepatic insufficiency. Nonetheless, bone biopsy more frequently shows evidence of osteoporosis than of osteomalacia.[2] Possibly osteoporosis in biliary cirrhosis results from impaired protein metabolism of bone. Albright based his theory of osteoporosis on insufficiency of protein matrix and differentiated it from osteomalacia, which results from deficiency of minerals. Recent preliminary evidence shows that the protein matrix of osteoporotic bone is abnormal.[9] Unexplained is the reason for the osteoporosis which occasionally accompanies acromegaly. It seems paradoxical that bones should become weak at a time when protein formation and bone growth are rapid. Perhaps the calcium-wasting effect of large doses of growth hormone may help to explain this paradox.

TABLE 1.—*Causes of Osteoporosis.*

I.	Common Causes:
	A. Immobilization
	B. Hypogonadism
	1. postmenopausal state
	2. eunuchoidism
	3. gonadal dysgenesis
	4. senility
	C. Excess of catabolic hormones
	1. Cushing's disease
	a. spontaneous
	b. iatrogenic
	2. Thyrotoxicosis
II.	Rare Causes
	A. Fragilitas ossium
	B. Scurvy
	C. Biliary cirrhosis
	D. Acromegaly
	E. Pregnancy
	F. "Idiopathic"

TABLE 2.—*Strontium Dynamics in Various Types of Osteoporosis.*
(Values are calculated in terms of calcium)

Condition	No. of Subjects	Exchangeable pool mEq.*	Total Turnover mEq./24 hr.*	Urinary excretion mEq./24 hr.*	Bone deposition mEq./24 hr.*
Normal	24	228 ± 7	73 ± 3.6	21 ± 1.6	52 ± 2.4
Type of Osteoporosis:					
1. Postmenopausal	37	162 ± 5	45 ± 2.0	12 ± 1.1	32 ± 1.4
2. Cushing's disease	2	106 & 141	44 & 76	31 & 43	13 & 33
3. Hyperthyroidism	5	305 ± 17	157 ± 25	38 ± 19	105 ± 8
4. Acromegaly	9	392 ± 35	124 ± 7.7	33 ± 3.9	92 ± 12.3

*Mean ± standard error

Most cases of what was once called idiopathic osteoporosis begin in the third trimester of pregnancy.[11] After delivery fractures cease but the bones remain radiolucent. The cause of this type of osteoporosis is unknown. Nordin speculated that it may result from increased corticoid elaboration during pregnancy. Finally, a small number of cases of osteoporosis occur in young adults without evidence of other disease. These are not understood, hence are properly termed idiopathic. This particular condition apparently responds only to intravenous administration of serum albumin.[1]

Pathophysiology

By use of the strontium tracer technique, my colleague, Dr. Eisenberg, has shown that there are two kinds of osteoporosis: one associated with decreased bone formation and another attributable to increased bone breakdown.[6] Table 2 shows that in postmenopausal osteoporosis the mineral pool is small, turnover of the bone-seeking mineral is subnormal, and bone deposition is decreased. The low rate of bone deposition in patients with postmenopausal osteoporosis is not the result of small body size. When corrected for body weight or surface area, the rate is still low. Cushing's disease shows the same phenomenon, only more intensively, together with increased urinary excretion of the bone-seeking mineral. Administration of large doses of corticoids to normal subjects soon causes a similar rapid rate of urinary excretion of the bone-seeking mineral, but at this early stage bone deposition is actually slightly accelerated, probably as a compensatory phenomenon. The decreased rate of bone deposition found in spontaneous longstanding Cushing's disease probably represents failure of the compensatory osteoblastic activity noted in the short term corticoid administration studies.

Symptoms and Complications

In most cases, osteoporosis is discovered because of pain in the lumbar spine. Radicular radiation is not the rule and suggests osteophytosis, vertebral collapse, or some other complicating condition. Surprisingly, osteoporosis can exist, become severe, and cause multiple vertebral fractures without symptoms.[7] Fractures and kyphosis cause loss of stature. The patient's height, carefully measured without shoes, cannot simply be compared with her impression of previous height since most persons entering a doctor's office believe they are two inches taller than they are. Previous height can be guessed from the span, as Leonardo da Vinci pointed out in 1490.[3] Comparing the span with the height, we have been able to detect losses of eight or ten inches, which seem convincing. Similar proportions, however, are found also in certain persons without osteoporosis, namely, normal Negroes, patients with arachnodactyly (Marfan's syndrome), and prepuberal eunuchoid patients.

Osteoporosis does not cause generalized bone tenderness. Fractures, however, may cause exquisite local tenderness. Other findings of borderline value on physical examination include thinness of the skin of the dorsum of the hand and, in most cases, a remarkable freedom from Heberden's nodes. This last point is of some value in differentiating back pain resulting from osteophytosis. The principal complications of osteoporosis are vertebral fractures and kyphosis. Urist has observed osteoporosis to be frequent in women with fractures of the femoral neck.[15] Conversely, there has been only one case of fracture of the femoral neck in more than 200 patients with osteoporosis seen in our clinic since 1948. I suspect this is because Urist is an orthopedic surgeon who sees fractures of the femoral neck which occur at the same age as osteoporosis.

Another complication of therapeutic importance is

nephrolithiasis. This is probably the result of excretion of large amounts of calcium and phosphorus, the breakdown products of bone. It is infrequent in our experience, probably because hypercalcuria is not enhanced by administration of calcium or vitamin D as is done in some clinics.

Examination

Laboratory findings are of particular value to exclude other conditions which may simulate osteoporosis. Early in the course of the disease, urinary calcium excretion is increased and may be detected by a 4 plus Sulkowitch reaction. Later, when the bone trabeculae are exhausted, urinary calcium excretion may be low indeed. Most 80 or 90-year old patients excrete only 20-25 mg. of calcium per day. Usually the blood calcium, phosphorus, and alkaline phosphatase levels are all normal; if not, the condition is not simply osteoporosis. In particular, we have never seen an elevated alkaline phosphatase level in uncomplicated osteoporosis. Serum proteins should also be measured, preferably by electrophoretic fractionation, since such knowledge is of value in interpretation of the blood calcium level and helps to exclude myeloma, which can simulate osteoporosis exactly.

Roentgen examination is of great value. In osteoporosis, the earliest changes are found in the weight-bearing vertebrae below T_7. The earliest discernible roentgen change is loss of the secondary (branching) trabeculae. Later, the primary trabeculae cast less shadow than normal so that the contrast between cortex and spongiosa is greatly increased. This gives the false appearance of a vertebra that consists of a rim of cortex (Fig. 2). Cortical erosion should make the examiner think strongly of other conditions, such as malignant tumor, osteomalacia, or hyperparathyroidism. As the vertebrae become weaker, they become biconcave. The intervertebral discs bulge superiorly and inferiorly and may actually herniate into the body of the vertebrae (Schmorl's nodules). Schmorl's nodules also occur in other conditions in which the vertebrae are weakened, particularly in juvenile epiphysitis (Scheuermann's disease).

Fig. 2. Moderate osteoporosis in 37-year-old eunuchoid woman. Note increased contrast between dense cortex and radiolucent spongiosa and biconcavity of all vertebrae.

The vertebrae may fracture with little or no trauma, also, usually starting in the region below the seventh thoracic vertebra, most commonly in the lumbar spine. A single vertebral fracture occuring at a higher level is almost never attributable to simple osteoporosis. A higher location strongly suggests another cause, such as trauma; epilepsy; convulsions induced by insulin, Metrazol, or electroshock;[4] and particularly, malignant disease. Eventually, biconcavity, wedge fractures with the apex anteriorly, and diminished height of the vertebral bodies cause kyphosis. At this stage, the vertebrae are radiolucent and the aorta is often calcified, giving the appearance that it is the aorta rather than the spine which supports the patient (Fig. 3). Earlier than this, the examiner should not rely on radiolucency alone, since it can be artifactually produced by increased kilovoltage when the roentgenogram is made or by increased soft tissue.

The distribution of lesions is of value, not only because osteoporosis starts in the lumbar and low thoracic spine, but also because it may indicate the cause of osteoporosis. The common postmenopausal variety of osteoporosis usually does not cause roentgen changes in the skull, ribs, or long bones. The

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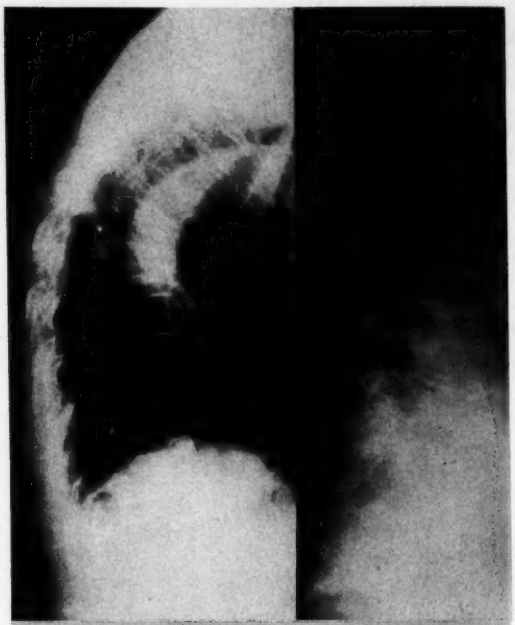

Fig. 3. Advanced osteoporosis with loss of trabecular pattern, biconcavity of all vertebrae, multiple fractures, and kyphosis.

most severe types of osteoporosis, particularly those of Cushing's syndrome or thyrotoxicosis, commonly cause rib fractures and radiolucency of the skull.[8]

No roentgen changes are pathognomonic of osteoporosis. An identical roentgen appearance occurs in some cases of diffuse myeloma (Fig. 4), carcinomatosis (Fig. 5), or epiphysitis. It is important not to confuse osteoporosis and malignant disease, particularly if the latter is amenable to treatment as metastatic cancer of the breast or thyroid, or myeloma which has a prognosis different from that of osteoporosis.

Differential Diagnosis

The differential diagnosis includes two factors: (1) exclusion of conditions which simulate osteoporosis and (2) establishment of the cause of osteoporosis. Malignant disease, especially, myeloma and carcinomatosis (most frequently from the breast), can mimic the roentgen findings and some of the symptoms of osteoporosis. Myeloma may be difficult to recognize clinically but is often differentiated by the characteristic electrophoretic protein pattern, hypercalcemia, proteinuria, and punched out lesions in the ribs or skull. If suspicion is sufficient to warrant further examination, histologic evidence of myeloma is found in the bone marrow. Carcinomatosis can be

Fig. 4. Lumbar spine of 76-year-old woman with diffuse form of myeloma, anemia, proteinuria, hyperglobulinemia, and solid sheets of myeloma cells in marrow biopsy. Arrows indicate fractures.

even more difficult to detect unless cortical erosion or pathognomonic localized lesions with surrounding eburnation are seen. Alkaline phosphatase level and sedimentation rate are often—but not always—elevated in carcinomatosis and are not increased by osteoporosis alone. We have had our greatest difficulty in the clinical differentiation of back pain attributable to osteophytosis (osteoarthritis, degenerative joint disease), spondylolisthesis, epiphysitis, and acute strains. Postmenopausal osteoporosis and visible osteophytosis or Heberden's nodes only in-

frequently co-exist. Radicular pain is typical of osteophytosis or spondylolisthesis and is uncommon in osteoporosis. The presence of one does not exclude the other. Epiphysitis is best differentiated by its early onset in juvenile life and the characteristic "coffin cover shape" of the back. Usually the bones are not radiolucent unless there has been considerable immobilization, and it is the vertebrae of the middle or upper thoracic spine which are involved. In addition, osteophytes usually are seen at the adjacent joints because of the localized abnormal mechanical strain. Distinguishing osteomalacia and hyperparathyroidism usually is not difficult since their roentgen appearance is different and the chemical changes are pathognomonic. These conditions can, however, co-exist with osteoporosis and should be uncovered in the complete investigation of the patient with osteoporosis.

The cause of osteoporosis may not always be apparent at first. Graves' disease in elderly people is often masked. It may be suggested by involvement of the ribs, skull, and long bones, or by tachycardia if it is not masked by tranquilizers. More often Graves' disease is diagnosed because of the careful clinician's knowledge that it should be considered in all cases of osteoporosis. If, conversely, Cushing's disease is the cause of osteoporosis, it is usually flagrant. Again, disease of the ribs and skull should awaken suspicion. Previous corticoid administration may have caused fractures in the past and may no longer be evident at time of examination. A careful history should elicit this cause.

Treatment

The most important factor in obtaining good clinical results in treatment is exclusion of other causes of vertebral disease and recognition of osteoporosis, if such it be. Whenever possible, the cause should be removed, for example, an adrenal cortical tumor, large doses of cortisone, thyrotoxicosis, malnutrition, or immobilization. The most important single cause amenable to treatment is hormonal deficiency in the postmenopausal or hypogonadal patient. Orthopedic supportive measures include the use of light corsets, perhaps with two or three removable steel supports, or occasionally a light jacket, but immobilization must be avoided. Plaster casts give temporary relief of pain but on removal further fractures are frequent because of immobilization.

Since most of our patients with osteoporosis are postmenopausal women, the most important single therapeutic maneuver is replacement of estrogen. This is easily provided by daily administration of Premarin, 1.25 mg.; ethynyl estradiol, 0.05 mg.; stilbestrol, 1 mg.; or methallanestril, 6 mg. We prefer to give these agents cyclically to avoid unremitting

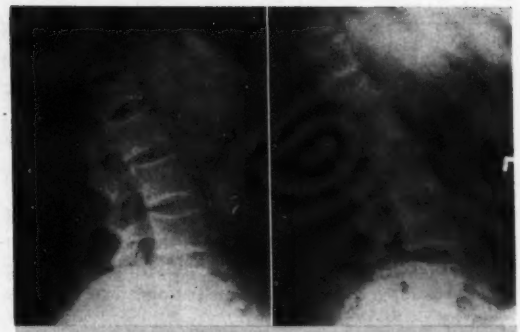

Fig. 5. Lumbar spine of 55-year-old woman with back pain, normal blood count, sedimentation rate, and alkaline phosphatase level five years after radical mastectomy. At original examination (L) there were no changes typical of malignant tumor but film six months later (R) showed rapid compression, cortical erosion, and eburnation.

estrogenic stimulus to the endometrium and breasts. Even in patients who have had hysterectomy, the cyclic program of therapy has both theoretical and practical advantages. Estrogen alone in these minimal doses promotes positive calcium balance, reduces urinary excretion of calcium, and stops breakdown of bone (as shown by tracer studies, for example, Table 3). It also almost uniformly relieves back pain in about three weeks, but this observation must be tempered by the results of a recent study Drs. Solomon, Dickerson, and Eisenberg conducted by the double-blind technique in our clinic.[13] The subjective endpoint of pain and objective effects on urinary excretion of endogenous calcium and of an administered test load of strontium were measured in 12 women with osteoporosis. The patients received estrogen, androgen, Dexamyl (as an active placebo), and lactose (an inert placebo), respectively, for six weeks each. Each woman received all four medications, but in varying orders provided by a Latin square to avoid confusing the results of any one therapy with possible residual effects of a previous agent. As in previous studies, administration of estrogen and adrogen reduced the urinary excretion of calcium; it also reduced the rate of excretion of the

TABLE 3.—*Evaluation of Treatment by Double-Blind Technique in 12 Women with Osteoporosis.*

Agent	Subjective Effects		Objective Effects on Urine Excretion/Day	
	Relief of Pain	Production of Well Being	Ca. (mg.)	Sr. (mg.)
Lactose	7/12	6/12	—10	0
Dexamyl	11/12	11/12	+ 3	0
Estrogen	11/12	11/12	—24*	—34*
Androgen	0/12	1/12	—23*	—56*

*p less than 0.01

strontium test load. Estrogen therapy also relieved pain in 11 of 12 patients. However, the active placebo Dexamyl also relieved pain in the same 11, and the inert lactose relieved pain in 7 and produced well-being in 6. Surprisingly, although the fluorinated androgen used in this study objectively reduced bone breakdown, it caused malaise in 11 of 12 and relieved pain in none. It is thus apparent that relief of pain is not a reliable endpoint in judging the efficacy of treatment in patients with osteoporosis.

We believe that estrogen administration is effective because it promotes positive calcium balance and stops bone destruction, as shown by the strontium study. Patients who have been sustaining fractures and losing height uniformly cease doing so during estrogen therapy.[8a] In our large series of estrogen-treated patients with osteoporosis, a fracture has never been seen once therapy, with the doses of estrogen listed above, was instituted and maintained. The facts that estrogen reduces the rate of bone destruction but does not increase the rate of bone formation and that roentgen appearance of the bone does not change after as much as 20 years of estrogen therapy suggest that estrogen therapy arrests but does not cure osteoporosis.

Administration of estrogens in cycles, easily accomplished by having the patient take one tablet each night at bedtime except during the first week of each month, permits evaluation of withdrawal bleeding. If patients have vaginal bleeding at times other than during withdrawal of the hormone, they should immediately be examined for other possible causes such as submucous fibroids, endometrial polyps, tumors, cervical erosions, or cancer. Before estrogen therapy is begun and every six months thereafter, every patient should have a physical examination, with special attention to breasts and pelvic structures, and a vaginal smear for cytologic examination. These are minimal safeguards for protection of the patient and (forensically) the physician.

Although balance studies show that administration of testosterone compounds is as effective as estrogen therapy in the treatment of postmenopausal osteoporosis, we do not use these compounds because of the undesirable masculinizing effect almost invariably produced by effective doses. Attempts to minimize such effects by combining inadequate doses of estrogen with inadequate doses of androgen have been unsatisfactory in our clinic; patients treated with these mixtures sustained fractures, vaginal bleeding, and undesirable masculinization.

The question invariably rises: Are therapeutic doses of estrogen carcinogenic? Several years ago Dr. Mustacchi and I reviewed the records of our clinic to see how many tumors had developed in estrogen-treated patients.[10] At that time we had 600 patient-years of experience in the treatment of osteoporosis with estrogens. The normal incidence of cancer in women of this age group in our geographical location would have led us to expect five or six cases. No malignant tumors have been detected (Table 4). Our experience is now about 1,100 patient-years and still no cancers have been seen. These data are adequate to indicate that estrogen, in the doses used and administered cyclically, is not a potent carcinogen. If the same results obtain after 20 years, I believe it will be evidence that estrogen therapy prevents cancer. Such a conclusion would not be surprising, for the incidence of cancer increases with age while estrogen production is on the wane. We are not yet able to make so categorical a statement, but believe that our data are adequate to prove that there is not danger of inducing cancer by giving these doses of estrogen in this way.

TABLE 4.—*Neoplasms Detected.*
(Estrogen-treated osteoporotic women, 1947-1957)

Number of patients in study	120
(Semiannual: Physical examination; Gynecologic consultation; Cytologic examination of vaginal smear)	
Malignant tumors predicted	5
Neoplasms found	
Adenomatous hyperplasia of endometrium	2
Adenomyosis uteri	1
Fibroadenoma of breast	1
Parathyroid adenoma	1
Malignant tumor	0

From Mustacchi, P., and Gordan, G. S.: Frequency of Cancer in Osteoporotic Women, in Segaloff, A., Ed.: Breast Cancer, St. Louis, C. V. Mosby Co., 1958, p. 167.

Summary

The diagnosis of osteoporosis requires a combination of clinical, chemical, and roentgen examination. No one of these by itself is adequate. The physician should exclude other causes of radiolucency. Having established the diagnosis as osteoporosis, he must establish its cause.

Good therapeutic results require adequate treatment of the specific cause, for example, removal of a causative adrenal cortical tumor or correction of thyrotoxicosis, immobilization, or malnutrition. Evaluation of the efficacy of treatment requires the use of objective endpoints, such as accurately measured height, the incidence of fractures, and measurement of urinary calcium excretion or of tracers of bone

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mineral metabolism. Subjective data can be misleading since any agent administered can relieve pain.

In our clinic, cyclically administered oral estrogens have been both subjectively and objectively effective. In approximately 1,100 patient-years of estrogen therapy for osteoporosis, careful examination of each patient every six months has shown not a single case of cancer.

REFERENCES

1. Albright, F., and Reifenstein, E. C., Jr.: The Parathyroid Glands and Metabolic Bone Disease, Baltimore, Williams and Wilkins, 1948.
2. Atkinson, M., et al.: Malabsorption and Bone Disease in Prolonged Obstructive Jaundice, Quart. J. Med. 25:299 (July) 1956.
3. daVinci, L.: The Works of —, London, The Reprint Society, 1958, p. 215.
4. Dewald, P. A., et al.: Vertebral Fractures as Complication of Electroconvulsive Therapy, J.A.M.A. 154:981 (March 20) 1954.
5. Donatus, M., cited by Bick, E. M.: Source Book of Orthopaedics, ed. 2, Baltimore, Williams and Wilkins, 1948, p. 47.
6. Eisenberg, E., and Gordan, G. S.: Skeletal Dynamics in Man Measured by Nonradioactive Strontium, J. Clin. Invest., in press.
7. Gershon-Cohen, J., et al.: Asymptomatic Fractures in Osteoporotic Spines of Aged, J.A.M.A. 153:625 (Oct. 17) 1953.
8. Howland, W. J., Jr., et al.: Roentgenologic Changes of Skeletal System in Cushing's Syndrome, Radiology 71:69 (July) 1958.

8a. Henneman, P. H., and Wallach, S.: Review of Prolonged Use of Estrogens and Androgens in Postmenopausal and Senile Osteoporosis, Arch. Int. Med. 100:715 (Nov.) 1957.

9. Kelly, M., et al.: Bone Matrix and Osteoporosis, Lancet 2:1125 (Dec. 19) 1959.
10. Mustacchi, P., and Gordan, G. S.: Frequency of Cancer in Estrogen-Treated Osteoporotic Women, in Segaloff, A., Ed.: Breast Cancer, St. Louis, C. V. Mosby Co., 1958, p. 163.
11. Nordin, B. E. C., and Roper A.: Post-Pregnancy Osteoporosis; Syndrome? Lancet 1:431 (Feb. 26) 1955.
12. Salter, W. T., and Aub, J. C.: Studies of Calcium and Phosphorus Metabolism; Deposition of Calcium in Bone in Healing Scorbutus, Arch. Path. 11:380 (March) 1931.
13. Solomon, G. F., et al.: Psychologic and Osteometabolic Responses to Sex Hormones in Elderly Osteoporotic Women, Geriatrics 15:46 (Jan.) 1960.
14. Urist, M.: Observations Bearing on Problems of Osteoporosis, in Rodahl, K., et al., Eds.: Bone as a Tissue, New York, McGraw-Hill, 1960, p. 18.
15. Urist, M., et al.: Senile Osteoporosis as Disorder Influencing Treatment and End Results of Fractures of Hip: With Preliminary Report on Use of Collapatite, Am. Surg. 25:883 (Nov.) 1959.
16. Williams, R. H., and Morgan, H. J.: Thyrotoxic Osteoporosis, Internat. Clin. 2:48 (June) 1940.

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Quackery Pretends to Be Scientific

"Good medical care is a bargain, no matter how much you have to pay for it," Wallace F. Janssen, public information division director for the U. S. Food and Drug Administration, told persons attending a recent conference on "Consumer Problems and Prospects" at the University of Texas, Austin.

"Quackery has many forms," he noted, "but it always pretends to be scientific."

While the FDA's activities help to protect consumers, he said, buyers can also protect themselves by "reading the fine print." Although many so-called remedies are obviously worthless, he pointed out, a person ill of a fatal or painful disease will try anything at any price. The great danger inherent in all kinds of quackery is that ailing people will put off medical treatment until it is too late, Janssen warned.

The FDA is one of the smallest federal agencies—with only 2,200 employees, of whom 600 are inspectors. The organization is in a long range expansion program recommended by a citizens' committee appointed by Mrs. Oveta Culp Hobby when she was Secretary of Health, Education, and Welfare. Congress has acted several times in recent years to strengthen the Food, Drug, and Cosmetic Act.

One of the FDA's biggest problems, Janssen told his audience, is the illegal sale of prescription drugs. Among these are "pep pills," sold in large quantities and especially to truck drivers trying to increase their earnings by making long runs.

Lewis A. Leavitt, M.D., and Herman Wing, M.D.

The Cervical Syndrome

Conservative Management

Adequate rest on a firm bed, administration of analgesics and muscle relaxants, use of physical therapeutics according to status of involved tissue, and a supplemental home therapeutic program are the primary factors in conservative management.

THE PATIENT WITH the cervical syndrome has a physical disability which in many cases symptomatically involves the cervical area, shoulder girdle, upper thoracic area, and upper extremity. Symptoms are varied and may include pain; muscular weakness, atrophy, or spasm; restriction of motion of head and neck or shoulders; numbness, tingling, or burning sensation; diplopia; vertigo; ataxia; or unsteadiness of gait.

Causes of this symptom complex may include trauma, degenerative osteoarthritis, cervical disc syndrome, postural defects, cervical rib, and scalenus anticus syndrome. All of these conditions may affect the cervical spine, nerve roots or cervical plexus, and nerves in and about the intervertebral foramina and contiguous soft tissue.

Although roentgenograms are an important part of clinical examination and, in cases of trauma, may reveal injuries to the bones and joints with possible dislocation or subluxation, more frequently roentgen findings are negative. Most symptoms are attributable to disease of the nerves and blood vessels of the musculo-ligamentous tissue, with a consequent complex neurologic and neurovascular cervical syndrome.

Correlation of Anatomy and Pain Mechanism

The intervertebral disc, made up of the nucleus pulposis, annular ligament, and cartilaginous plates, is resilient. The matrix is from 85 to 90 per cent fluid and lies centrally embedded in the cartilaginous plates between the opposing articular surfaces of the vertebrae. The annular ligament is an extremely strong fibrous capsule that binds the nucleus, cartilaginous plates, and vertebral bodies together.

Other ligaments supporting the cervical vertebrae are the anterior and posterior longitudinal ligaments which lock the vertebral bodies in a series of 2, 3, or 4 vertebrae by overlapping each other. The ligamenta flava firmly bind the laminae on each side posteriorly whereas the interspinous and supraspinous ligaments lock the spinous processes together. A fourth set, the intertransverse ligaments, lock the transverse processes together.

Cervical nerve roots, eight in number, leave the neural cord at almost a right angle opposite to the intervertebral disc of the next lower numbered vertebrae. The peripheral motor and sensory nerves pass first through the intervertebral foramina, then through the ligaments and fascial planes. Thus, any

disturbance of mechanical alignment can cause compression of these nerves, with radiation of motor and sensory symptoms to the musculo-ligamentous and neuroskeletal structures of the neck, head, shoulders, and upper extremities.

An understanding of the contiguous relationship between the co-vertebral joints and the adjacent vertebral artery is important. After this artery originates from the subclavian artery, it passes through the foramina transversaria of the lower six cervical transverse processes before entering the cranial cavity through the foramen magnum. Very little slack exists in this pipeline which carries blood and oxygen to the brain stem, and any occlusive process, such as exostosis from Luschka joints,[2] may be responsible for symptoms of nystagmus, vertigo, headache, diplopia, ataxia, or unsteadiness of gait pattern.

The vulnerability of the second cervical nerve root is enhanced by its lack of protection posteriorly by pedicles and facets and by the fact that its point of exit between the atlas and axis is the level of greatest rotation. This nerve continues as the greater occipital nerve as it pierces the tendinous insertion of the trapezius muscle and supplies the cutaneous nerve distribution of most of the scalp. Synapse between the greater occipital and trigeminal nerves is a physiologic explanation for persistent severe headaches involving the posterior occipital portion of the head, with radiation to the temporal and frontal areas and sometimes a deep persistent pain posterior to the eye. Palpation of the suboccipital area, or extreme motions in lateral flexion with rotation or hyperextension of the head that causes traction of the second cervical nerve by the spastic upper trapezius muscle, will increase or reproduce the headache. Hence, the expression, "Headaches are often a pain in the neck".

The spinal accessory nerve and its anatomic relationships are also interesting in the diagnostic analysis of cervical syndrome. This nerve is made up of filaments of the entire cervical spinal cord. It ascends with the vertebral artery through the foramen magnum and passes through the jugular foramen to innervate the trapezius and sternomastoid muscles. Often persistent spasm of these muscles is secondary to contusion, hematoma of the muscle, or traction injury of the delicate filaments of origin of this nerve.

Also, the relationship of the sympathetic nervous system to the cervical nerve roots contributes to the neurophysiologic mechanism of pain. As the cervical nerve roots are composed of motor and sensory fibers only, the upper two dorsal roots with special communicating elements join the cervical roots and proceed upward to the cervical ganglions. From there, these cervical ganglia fibers pass to the cervical nerves, cranial nerves, heart, arteries of the head, neck, arms, and meningeal nerves to the dura and ligaments. Thus, spasm of the soft tissues of the neck, with no major skeletal damage, may cause direct irritation of the sympathetic nerves and give rise to symptoms similar to those of cervical root irritation. Conversely, direct irritation of the cervical root may reproduce symptoms that are secondarily attributable to sympathetic nerve irritation, and thus add further confusion to the clinical syndrome.

Diagnosis

A careful history and clinical examination is of utmost importance. The physician must realize that his responsibility does not end with a diagnostic impression; he must also carefully conduct the treatment program and follow-up evaluations until the patient is able to resume work. The examination should emphasize neurologic and musculoskeletal detail.

Roentgen examination should include posteroanterior and oblique views of the cervical spine and views to visualize the atlas and odentoid and to detect any dislocations. Persistent loss of the normal cervical curve suggests muscle spasm secondary to irritation of involved tissue. The roentgenographic views recommended by Abel[1] are useful when findings on routine x-ray films are negative and pain persists. Myelographic studies are useful in those cases in which there are conflicting symptoms and diagnostic factors.

Other techniques which the authors have found helpful are electromyographic and electrodiagnostic studies. These tests localize the site of injury if reflex changes or muscular weakness is noted during examination and provide qualitative information concerning the status of the nerve root, plexus, or peripheral nerve. They offer validating criteria in evaluating the treatment program and thus are prognostic when performed serially. From a diagnostic viewpoint, the physician is able to differentiate and adequately to locate the level and extent of a lesion

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of the nerve root, plexus, or peripheral nerve (lower motor neuron). Through establishment of the rheobase, or the strength of the stimulus required to produce excitation of the muscle and the chronaxie, or through the duration of the applied stimulus, the examiner can quantitatively assess the excitability of the involved neuromuscular components. Also of major importance is absence of positive findings, which is reassuring to the patient and which substantiates the physician's clinical impression. Electromyographic examination of the "trigger areas", or localized areas of point tenderness of the involved musculature, at rest exhibits a high frequency chain-like discharge. Examination of the other portions of the muscle at rest reveals electrical silence. Such spikes of these highly sensitive areas recorded with a monopolar needle electrode have a frequency of 10-125 per second and an amplitude of 750-1,500 micro-volts with duration of 2-3 milliseconds. These irritative potentials are suggestive of an abnormal myogenic focus.

Pain, in its distribution and characteristics, is discriminatory in determining the etiology. Thus, strain or injury of the periarticular tissues is dull and aching, whereas irritation of the exposed nerve root is dermatogenous or lightning-like and radiates to the skin. The first type of pain is deep and is confined to the muscle groups in which tendons or ligaments are involved. It has a lack of radiation along nerve pathways and no sensory or reflex changes. There is no muscle atrophy or weakness, and the examiner receives the impression of ligamentous strain.

Pre-existing osteoarthritis of the cervical spine may complicate the clinical picture. With or without secondary strain or trauma, it may produce many symptoms referable to the cervical area, including deep sclerotogenous pain of the muscle and bone, paresthesias, headache, muscle spasm, and point tenderness.

A large number of patients with pain syndromes for many months and a relatively inconsequential history have muscle spasm. Within these muscles "trigger areas" can be located. Findings of the examination may be negative and no evidence of an organic disease may be found to account for the disability. Nevertheless, specific treatment directed toward these trigger areas sometimes affords dramatic relief and is a useful basis for prescription of a program of physical medicine. A "trigger area" is a physical sign noted during examination; when such a region is palpated, pain is evoked at a distant and predictable area.[3] In the cervical syndrome, "trigger areas" are frequently found in the suprascapular portion of the trapezius, causing pain in the mastoid area. The sternocleidomastoid muscle may have a "trigger area" in the clavicular division with pain distribution in postauricular and frontal areas, and autonomic effects of postural dizziness and imbalance. Localization of a "trigger area" of the levator scapulae and/or interscapular portion of the trapezius refers pain to the top of the shoulder and upper posterior part of the neck with secondary spasm of the cervical erector spinae. Pain of the index finger and thumb may be frequently intensified by localization of a "trigger area" of the pectoralis major. Thus, the myofascial pain syndromes are another means of interpretation and treatment of pain and disability of the cervical syndrome.

Symptoms and signs of cervical disc herniation with nerve root involvement are either irritating—that is, lacinating pain with muscular spasm and paresthesias—or inhibitory, that is, muscular atrophy, weakness, loss of reflexes, and sensory skin changes which develop after several weeks.

Scalenus anticus syndrome may produce symptoms referable only to the neck or may involve the shoulder, chest, arm, and hand. Pertinent features are a feeling of great weight in the involved upper extremity, loss of gripping power, cold sensation of the arm and hand, pain on compression of the scalenus muscle, changes in arterial or venous blood flow in varied positions of the arm and head, or pain in the pectoralis muscle with loss of pectoral reflex and no dermatomic distribution of pain.

Treatment

After a definitive etiologic impression of the patient's pain syndrome is obtained, a treatment program is started. Primary objectives are relief of pain and restoration of motion by relaxation of the cervical, scapular, shoulder, and other musculo-ligamentous structures involved. This is achieved by specific use of modalities, remedial exercise, and other specialized techniques.

Routinely, cervical traction—either intermittent or constant of variable intensity—with some form of heat and massage is prescribed. Sometimes this is helpful, but frequently pain is not alleviated completely.

In patients with more persistent manifestations, the etiologic factors involved should be determined. The patient should then be thoroughly acquainted with his present condition in relationship to activities to be accomplished, both within the clinic or hospital and at home. Patients quickly become aware of aggravating factors, such as neck movements, flexion to site of lesion, jolting, or occupational positions which increase their discomfort. Likewise, they learn that certain positions of the body, head, or neck give relief of pain; thus their voluntary immobilization further induces complications. Thus, careful analysis

of the patient's condition, limitation of motion, aggravating or relieving positions, and vocational situations must be a part of the patient's orientation. Reassurance and specific instruction of postural attitudes is to be encouraged, and a home treatment program, supplemental to clinic or office treatment, is necessary to gain the patient's intelligent cooperation.

To gain relaxation of the involved musculoligamentous and neurovascular tissue, hydrocollator packs (hot fomentations) should be applied for 20-30 minutes, two to three times daily, to the anterior-posterior shoulder girdle and neck musculature. Microwave diathermy, of moderate intensity, Director B or D for 20 minutes, followed by active assistive mobilizing exercises, also has proved useful. Frictional massage, moderately deep to tolerance, to localized areas of tenderness, followed by sedative massage, gives good relaxation.

During the past several years, the authors have also found that application of ethyl chloride spray to the "trigger area" and zone of referred pain affords good relief for varying periods.[3] For resistant pain, careful localization of the "primary trigger area" within the levator scapulae, sternocleidomastoid, or supraspinatus musculature and injection of this tissue with medication of choice (that is, isotonic saline, 1 per cent or 2 per cent Xylocaine, or hydrocortisone) is instrumental in the treatment program. Ultrasound, using a moving head, 0.5 to .75 watts/sq. cm. for five to eight minutes to the localized painful areas is also useful.

Case Report

A 38 year old white male, a seismograph driller, was referred to the physical medicine department. Chief complaint was pain of the cervical area with radiation into the right upper extremity, thumb, and index finger of seven to ten days' duration. Similar episodes of pain during a ten year period, had lasted from several days to a few weeks and had been relieved by local heat, traction, and administration of salicylates. During the previous four years, the pain syndrome had become more severe and longer in duration with each episode. The most recent episode had been even more severe and had not responded to routine treatment. The patient described numbness and tingling of the right thumb and index finger, but no definite motor weakness.

A well-nourished, well-developed male in acute distress, had severe muscle spasm of the right cervical musculature and localized point tenderness of the right infraspinatus and upper trapezius muscles. No areas of hypesthesias to pin prick were noted, but there was some decrease of sensation to light touch over the dorsal aspect of the right thumb. Reflexes were equal in both upper extremities. The findings of the remainder of the neurologic examination were relatively normal, and no significant abnormalities were noted in the general physical examination. Roentgenograms of the cervical spine showed some straightening of the normal curve, but were otherwise negative. Laboratory findings were within normal limits. Serial electromyographic and electrodiagnostic studies of the neuromuscular components of the cervical and right upper extremity showed no evidence of lower motor neuron disease.

Treatment consisted of hydrocollator packs to the right posterolateral cervical and posterior shoulder girdle musculature, followed by ultrasound threapy to localized areas as previously described. Xylocaine, 2-3 cc., was injected into areas of tenderness of the upper trapezius and infraspinatus muscles. The patient's symptoms subsided and he was discharged after three weeks of treatment programming relatively pain free. He has been working daily for the past three months.

REFERENCES

1. Abel, M. S.: Radiologic Aspects of Moderately Severe Cervical Spine Trauma, Arch. Physical Medicine 40:371 (Sept.) 1959.
2. Hadley, L. A.: Convertebral Articulations and Cervical Foramen Encroachment, J. Bone & Joint Surg. 39A:910 (July) 1957.
3. Travell, J.: Referred Pain from Skeletal Muscle, New York J. Med. 55:331 (Feb. 1) 1955.

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Obese Children Mean Obese Adults

Obese children will probably become obese adults.

Three physicians, writing in a recent issue of the *British Medical Journal,* report from a nine-year study of 98 overweight children: "There was a strong tendency for the obesity to recur after initial weight reduction and then to persist into young adult life."

The investigators advise hospitalization at the beginning of the weight reduction program in all grossly overweight children (that is, 50 to 60 per cent above normal); energetic treatment, and long-term follow-up to prevent relapse.

The authors were Drs. June K. Lloyd, O. H. Wolff, and W. S. Whelen.

Management of Common Hand Injuries

Thomas B. Quigley, M.D.

NO INJURY to the hand is minor. The hand is secondary only to the brain in functional importance, being the primary tool for implementation of cerebral concepts. Indeed, the basic differences between man and the ape are hypertrophy of the frontal lobes of the brain and the ability to oppose the thumb against the fingers.

Four major basic questions must be answered in the management of any injury:

1. What is the precise extent of injury?
2. What should be done?
3. How should it be done?
4. When should it be done?

The fourth question is the easiest. The answer is *now*. In a golden period of a few hours after any injury, more can be done to restore function than at any later time. Injured hands, in particular, do not respond kindly to indecision and temporizing. Only rarely does concomitant trauma or disease make it necessary to defer a definitive management program.

The following pattern of answers to these basic questions is that followed at present by the Hand Clinic of the Peter Bent Brigham Hospital. It contains little that is original or at variance with practice at other centers where hand injuries are regarded as important and worth the continuous cooperative attention of interested members of the staff. The sources and origins of particular procedures, policies, and techniques are legion, and to present them all would require little less than a review of the entire literature on the subject. References are therefore confined to a few studies for which the author and his colleagues are personally responsible. However, the inquiring reader is referred particularly to the late Sterling Bunnell's classic volume, "Surgery of the Hand",[1] and to the papers presented in recent years at meetings of the American Society for Surgery of the Hand, published in the *Journal of Bone and Joint Surgery*.

Open Injuries

1. *Analysis.* Primary examination is done in the emergency room. For all but the most trivial injuries, a mask is worn and sterile instruments are used. Deformity, loss of tissue, vascular integrity, active function, and sensation are carefully observed and recorded. Roentgenograms are made. Arterial hemorrhage is controlled by tourniquet rather than by blind clamping which, more often than not, produces further injury. Sterile gauze is applied with a cotton elastic bandage, and a splint with the hand in the position of function.

The patient as a whole is not forgotten. A general history is obtained, as well as a specific history of the injury. A complete physical examination is carried out and basic laboratory determinations, includ-

The author considers any hand injury important and worthy of meticulous care. He outlines the policies and practices of management of open and certain common closed injuries of the hand which are observed in the Hand Clinic of the Peter Bent Brigham Hospital.

ing at least a hematocrit determination and urinalysis. Forty per cent of patients with acute injuries have concomitant disease of significance.[6]

2. *Anesthesia.* In the operating room, with good light and use of sterile precautions, the first dressing is removed, the injury again is carefully analyzed, and a surgical plan of management is decided. At this point, before the induction of anesthesia, the nature of the injury is completely explained to the patient and his consent for the proposed procedure obtained. It is incredible that any doctor of medicine would omit this simple conversation with his patient; yet its occurrence is recorded in the archives of the courts.

Anesthesia is then induced. Brachial plexus block, either axillary or supraclavicular, is usually the most satisfactory unless skin grafts are necessary, in which case an appropriate inhalation anesthetic is used.

3. *Skin Cleansing and Disinfection.* The wound is filled with sterile gauze, and grease or tar is removed with ether or acetone. The intact skin of the hand and forearm is scrubbed gently with a chlorine liberating household powder, with frequent copious rinses of sterile saline solution. When all visible dirt has been removed, scrubbing is continued with Phisohex. A convenient method of accomplishing this scrubbing is the "relay" system. The surgeon scrubs his own hands for a minute or two, then the patient's hand for a few minutes. After a rinse, the assistant who has been scrubbing his own hands, takes over. The surgeon continues his scrub and again returns. The result, in time, is five sterile hands. No further skin preparation is used. Colored solutions, such as iodine, mask the color of the skin and make the estimation of viability in the presence of an impaired blood supply difficult. Alcohol solutions may trickle into the wound and add the element of chemical burn to the injury.

4. *The Tourniquet.* After appropriate draping, blood is forced out of the arm by application of a sterile rubber or elastic cotton bandage and the pneumatic tourniquet is inflated. Pressure should never be greater than 300 mm. of mercury. The tourniquet should always be pneumatic. The uncontrolled pressure of a narrow rubber band, twisted tightly about the upper arm, can seriously damage blood vessels and nerves. A tourniquet should rarely, if ever, be used in a patient older than 50 or in any patient with potential peripheral vascular disease. It should never be allowed to remain in place for more than an hour.

When a tourniquet cannot be used, an adequate dry field free from venous oozing can be accomplished by elevating the hand above the level of the heart.

5. *Debridement.* The wound is gently irrigated with sterile saline and all dead avascular tissue is cleanly removed, without sacrificing living tissue. Excised tissues are sent at once to the bacteriology department for aerobic and anerobic cultures. The instruments, drapes, gowns, and glove used for debridement are discarded.

6. *Repair.* After the surgeons change gloves, gowns, and drapes, divided nerves, muscles, and tendons (except flexor tendons in the digital sheath of "no man's land") are carefully, cleanly, and delicately reconstructed. A binocular loupe of the type used by ophthalmologists is often useful. Fine silk is the best all-purpose suture material. Divided flexor tendons in "no man's land" should not, as a rule, be repaired primarily but should be replaced later by free tendon grafts. Fractures associated with open wounds should not be stabilized with metal unless the wound is extremely clean; closure can be accomplished without tension or difficulty, and the likelihood of sepsis is remote.

Amputation is a last resort but, unfortunately, is often unavoidable. The decision is clear when the blood supply to a finger is completely interrupted; suture of digital arteries has not yet been achieved. When two of the three basic components of a finger—bone, nerve, and tendon—have been irreparably destroyed, amputation is usually indicated. If the blood supply is intact, however, this need not be done during the first operation. Occasionally review of the problem at a later date is less discouraging and the finger can be saved. Every effort must be exerted to save the thumb, which is more valuable

than all of the other fingers together. No prosthesis is ever as good as the part it replaces.

7. *Closure.* Injuries involving high kinetic energies, such as those produced by missiles, radiate tissue damage far beyond the boundaries of the wound, cannot be completely debrided, and should never be primarily closed. Secondary closure a few days later by suture or graft, has been well established by the experience of two wars.

Most civilian injuries, if treated within a few hours of occurrence, can be closed successfully if complete hemostasis has been achieved after removal of the tourniquet, if dead space has been obliterated, and if viable skin edges can be brought together without the slightest tension. Skin grafting, when necessary, should be the simplest which will effect closure and cover. Thin split grafts can be replaced later by flaps, when appropriate.

8. *Dressing.* Voluminous, fluffed gauze or mechanics waste, held in place with an elastic cotton bandage, is used. Over this a splint, usually a plaster of Paris slab, is applied with the wrist, hand, and fingers in the position of function.

9. *Postoperative Care.* The hand is elevated above the level of the heart. Protection against tetanus[2] and a full week of broad spectrum antibiotic therapy are practically mandatory. If a dominant organism grows from the tissue cultured at the time of operation and is sensitive to a particular antibiotic, the original broad spectrum antibiotic can be changed. The dressing should not be disturbed for three weeks unless fever, pain, or other indications arise, or unless metallic fixation of fractures is necessary, which generally can be done at about ten days. Every part of the hand which can safely be moved should lie outside the dressing and should be continuously exercised. Surgical procedures with tendon grafts and skin flaps, when needed, can be done three weeks after injury.

Closed Injuries

Nerves, blood vessels, and tendons are infrequently involved in closed hand injuries, which usually are primarily confined to bones, joints, and ligaments. Analysis is therefore somewhat easier than in open injuries, but must be equally precise. Roentgenograms of good quality in at least two planes are essential.

The following common closed injuries can breed severe disability if they are not understood and promptly treated:[3, 4]

1. *Baseball Finger.* This avulsion of the extensor tendon from the distal phalanx, is usually treated too lightly. The disability which can follow its neglect is often more than a nuisance. Two general categories are recognized: those in which some degree of active extension is still possible and those in which all extension is lost. In either, an avulsion chip fracture from the distal phalanx may be present. The former is treated in a cylinder of six or seven layers of fine-grained plaster of Paris extending from the finger tip to the metacarpal phalangeal joint, with the proximal interphalangeal joint flexed at 90 degrees and the distal joint extended as much as is comfortably possible. This position relaxes the lumbrical-interosseous components of the extensor system, allowing the torn edges of tendon to lie against each other. This cast is tricky to apply, but difficulties can be minimized by fitting the dry plaster cylinder on the finger, dipping the hand quickly in water, and positioning the hand and finger on a firm table until the plaster has set firmly (Fig. 1). The patient is sternly cautioned against allowing the cast to become wet during the three weeks it remains in place.

Fig. 1. Cast for baseball finger. Position is maintained by patient until plaster sets. (From Quigley, T.B.: Minor Procedures in Fracture Management, Postgrad. Med. 7:46 [Jan.] 1950.)

In the second category there is complete rupture of all of the elements of extension at the distal phalanx. These are less common injuries, do not do well in plaster casts, and should be operated upon promptly. Exposure is through an S-shaped incision crossing the distal extension crease. Flaps are developed, and the central torn extensor hood is approximated to the distal phalanx through drill holes with a Bunnell wire pull-out suture. The joint is splinted in a cylindrical cast as described for incomplete tendon rupture.

Attempts to reconstruct the extensor tendon in old, neglected cases are usually futile. If the drooping phalanx is enough of a nuisance, arthrodesis at 135 degrees is accomplished.

2. *Fractures of Phalanges.* These fall into four general groups:

a. Avulsion Chip Fractures at the Interphalangeal Joints. These may well represent momentary dislocations or subluxations and are less important than the possible concomitant rupture of capsular ligament or extensor tendon. In the absence of severe ligament or tendon injury, the finger is simply taped to the adjacent finger, thus achieving both some degree of splinting and some degree of motion. In two or three weeks the taping can be discarded.

b. Fractures Involving One-Third or More of the Articular Surface of Interphalangeal Joints. If these are undisplaced, a splint is applied from the finger tip to the metacarpal phalangeal joint—whether the injury be at the distal or the proximal interphalangeal joint—with the finger in moderate flexion. This splint can be either plaster, metal, or plastic. After two weeks the splint is removed, and for another two weeks the finger is taped to the adjacent finger. If the finger is still displaced, operation or skeletal traction is indicated.

c. Comminuted Fractures of the Middle Phalanx. These are generally susceptible to closed reduction and splinting but occasionally require traction. When traction is indicated, it is achieved by a Kirschner wire inserted transversely through the distal phalanx and attached by an elastic band to an appropriate outrigger or banjo arrangement on a forearm plaster cylinder with a padded extension up to the distal interphalangeal joint with the wrist, hand, and fingers in the position of function.

d. Comminuted or Displaced Fractures of the Proximal Phalanx. For an undisplaced fracture or after acceptable closed reduction, splinting must extend from the distal joint to the proximal part of the forearm. Molded plaster of Paris is preferable to other splints. When traction is indicated, a hook fashioned from a Kirschner wire inserted through the extensor aspect of the middle phalanx is satisfactory.[5] A fair amount of active motion is possible and reduction is maintained effectively (Fig. 2).

3. *Dislocations.* Most interphalangeal dislocations are reduced by the patient. It is instinctive to seize the deformed finger and pull it out straight. If the patient is seen immediately before edema, pain, and spasm have developed, the range of active motion can be determined. If the range is normal, it can be safely assumed that rupture of the extensor hood, producing baseball finger at the distal joint or "buttonhole" rupture at the proximal joint, has not occurred. Also, torn capsule or collateral ligaments trapped within the joint can be considered excluded. If present, both conditions require prompt surgical repair. Roentgen examination is indicated in all cases, although major fracture is rare. Avulsion chips are not uncommon, and chips within the joint confirm the diagnosis of torn trapped ligaments.

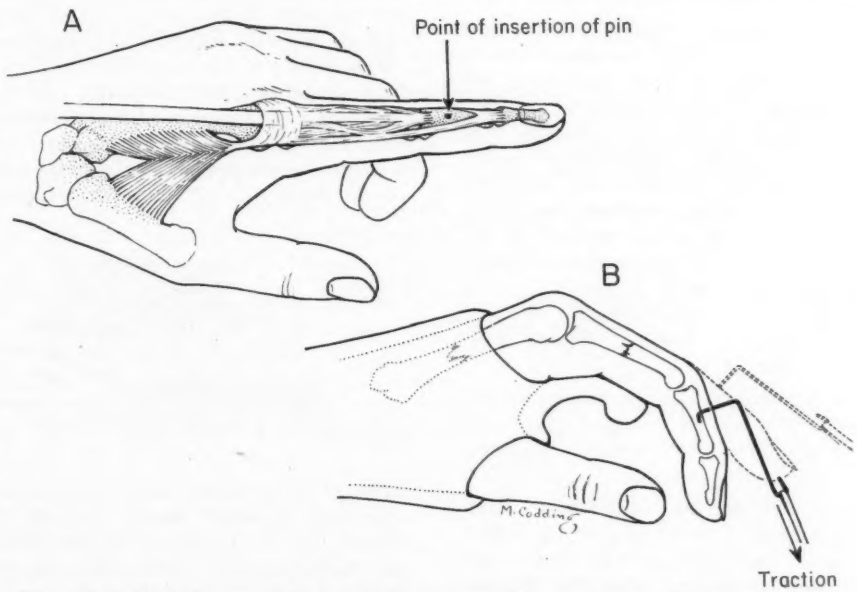

Fig. 2. "Fishhook" traction through dorsal cortex of middle phalanx for comminuted fractures of proximal phalanges and unstable fractures of metacarpals. This is the only site for skeletal traction in the hand which does not involve perforation of important structures and which permits active motion of the finger.

If, after reduction, the range of motion is normal, no further splinting than taping to the adjacent finger for a week or ten days is indicated. Similarly, immobilization should be kept to a minimum after operative ligament repair.

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4. *Metacarpal Fracture.* Spiral fracture of the shaft of the middle or fourth metacarpal is the most common type of fracture. Supported by adjacent intact metacarpals, volar and dorsal interosseus muscles, interosseous ligaments, and flexor and extensor tendons, the only significant displacement which this fracture can exhibit is a few millimeters' shortening. This does not produce significant disability. The only treatment necessary is protection. This can easily be accomplished by simple volar plaster splinting which must, of course, extend well up the forearm. After two or three weeks, full activity can be resumed with no more than adhesive tape protection.

When more than one metacarpal is involved, more vigorous treatment is indicated—whatever the fracture pattern—if dorsal angulation, shortening, and disability of significant degree are to be avoided. No precise rules can be established; each injury must be treated as its particular characteristics dictate. Closed manipulation and immobilization in plaster from the middle phalanx to the elbow, traction by a "fishhook" through the middle phalanx as described for comminuted fractures of the proximal phalanx, and open reduction with internal fixation each has a place. Little less than perfection of alignment and reduction can be accepted, whatever treatment method is chosen.

It should be remembered that fingers immobilized in flexion should point toward the radial styloid and should not be parallel to the accompanying metacarpals.

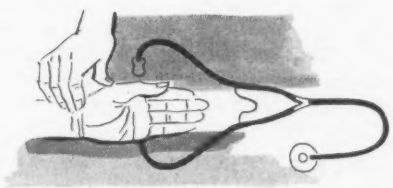
Intramedullary rods are often difficult to insert in metacarpals because of narrowness of the medullary canal. After reduction, fixation by stout wires inserted transversely above and below the fracture and through adjacent intact metacarpals is not difficult and permits early active motion.

Wires inserted down the shafts of metacarpals through the metacarpal phalangeal joints are not recommended. The connection thus established between joints and the outer world violate basic surgical principles.

5. *Bennett's fracture* of the medial side of the articular surface of the thumb metacarpal must be treated by open reduction or skeletal traction. Nothing less will overcome the displacement produced by the powerful long thumb flexor and extensor muscles. Pain and disability in neglected or unrecognized cases is severe.

6. *Fractures of the distal end of the fifth metacarpal* always are angulated toward the palm and can be troublesome. Reduction is accomplished by pushing the distal fragment into position through the proximal phalanx with the metacarpal phalangeal joint flexed at 90 degrees. Pulling on the finger is useless and dangerous. Maintenance of reduction can be difficult with any sort of splint, and transfixion with wires above and below the fracture into the intact fourth metacarpal is often the treatment of choice.

7. *Fracture of the carpal scaphoid* although not, strictly speaking, a part of the hand, is worth particular mention, since disability can be great if the fracture is not recognized. The results of promptly instituted treatment are excellent. It is one of the most important injuries which young men sustain, constituting nearly 8 per cent of fractures occurring in organized sport. Indeed, practically the only important injury of the wrist in this age group is fracture of the carpal scaphoid. Its management involves understanding of the simple fact that sprain of the wrist is a diagnosis of exclusion. Like Colles' fracture, the mechanism is probably primarily hyperextension and secondarily compression. A history of a fall on the outstretched hand, accompanied by pain on the radial side of the wrist, tenderness in the



depths of the anatomical snuffbox, and pain on percussion of the index knuckle with the metacarpal aligned with the radius, demands immediate roentgen study; multiple views and meticulous technique are essential. Even if no fracture is seen in any view, the wrist is immobilized in plaster for two weeks. The cast is removed, the patient is cautioned against violently flexing or extending his wrist, and

another set of roentgenograms is made. In about one-third of cases these will show the fracture line for the first time. The plaster is then replaced for the twelve to sixteen weeks that all who have studied this injury have found necessary for complete union. A few fractures unite more rapidly. The cast is changed and films are made at intervals of six to eight weeks. Immobilization beyond the proximal joint of the thumb is not necessary. The thumb metacarpal should be adducted, both to allow the cast to pass through the sleeves of clothing and to facilitate apposition of the thumb against the fingertips.

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REFERENCES

1. Bunnell, S.: Surgery of the Hand, ed. 3, Philadelphia, J. B. Lippincott, 1956.

2. Filler, R. M., and Ellerbeck, W.: Tetanus Prophylaxis, J.A.M.A. 174:1 (Sept. 3) 1960.

3. Quigley, T. B.: Injuries of Hand, Wrist, Forearm and Elbow Sustained in Organized College Athletics, Instructional Course Lectures, American Academy of Orthopaedic Surgeons, St. Louis, vol. 27, 1960, p. 368.

4. Quigley, T. B., and Banks, H.: Progress in Treatment of Fractures and Dislocations 1950-1960, Philadelphia, W. B. Saunders Co., 1960, p. 30.

5. Quigley, T. B., and Urist, M. R.: Interphalangeal Joints: Method of Digital Skeletal Traction Which Permits Active Motion, Am. J. Surg. 73:175 (Feb.) 1947.

6. Tannenbaum, C. J.: Relation of Concomitant Disease to Occurrence and Management of Trauma, Am. J. Surg. 95:897 (June) 1958.

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40 Hour Week Hits Medics

The 40 hour week has vitally affected our very way of life. Even medical care is bowing in its path—a fact that has not yet been recognized by medicine.

More and more, the public has been urged to see physicians regularly for check-ups, thus increasing the doctor's patient load. At the same time, nurses, receptionists, and other office personnel expect to work only 40 hours, thus limiting the time that a doctor can keep his office open on a full scale basis.

Hospitals, too, are feeling the pinch, and as employees gain the 40 hour week and proper pay as compared with employees in other areas, hospital costs will again be rising.

Writing in the July, 1961, issue of *New Medical Materia,* Dr. Charles K. Donegan, Durham, N. C., poses these questions and problems. He points out that the medical profession must not ignore this issue, but must learn to utilize better the available time with patients, and to see that dollars are not wasted by inefficiency. Also, recruitment of more doctors and medical personnel will result in more available time for patients who need medical care.

Questionnaires were sent to 82 patients who had had a fracture of the os calcis more than two years previously. Replies were received from 40, four of whom had had bilateral heel fractures. Although the number of satisfactory long-term results was better than was anticipated from the patients' status at time of dismissal from active treatment, the authors believe that an even better record can be obtained by varying the treatment according to the type of fracture, amount of displacement, and involvement of articular surfaces.

Late Functional Results

Fractures of the

FOLLOWING MOST fractures of the os calcis, active treatment is discontinued after approximately eight to twelve months, although both the orthopedist and the patient are frequently dissatisfied with the functional status at that time. Many of these patients still limp and complain of heel pain, particularly when walking over uneven ground, but comparatively few seek subsequent additional treatment. One wonders whether they continue to have pain, whether they obtain relief by changing occupations and putting less demand on the heel, or whether the pain and limp gradually improve spontaneously with time.

The purpose of this study was to try to evaluate the late functional end results of fractures of the heel, and to correlate these results with the method of treatment used. Since we were interested primarily in the patient's evaluation of his condition, the data on which the paper is based were obtained by sending questionnaires to the patients, asking a number of pertinent questions regarding the functional status of the previously fractured heel. In each case the follow-up information thus obtained was compared with the clinical evaluation of the patient at the time he was dismissed from active care, and roentgenographic studies. Questionnaires were sent to a series of 82 patients who had had a fracture of the os calcis more than two years previously. Replies were received in 40 of these cases. Four of the patients had had bilateral heel fractures, making a total of 44 fractures of the os calcis that could be analyzed. The follow-up periods ranged from 2 to 10 years, averaging 5.4 years. Thirty-three of the patients in this study were males. The average age was 48.3 years, varying from 29 to 72 years. Fourteen of the cases were covered by compensation or liability insurance.

Results were classified as good, fair, and poor. A good result was considered to be one with little or no residual pain in the heel, no limp, ability to continue in the occupation of the patient's choice, and ability to perform four test activities: climbing stairs, climbing a ladder, squatting, and tip-toeing. Included in the fair results category were those who complained of more frequent, but not constant, pain in the heel, occasional limp, or inability to perform one of the four activities previously mentioned. In the poor results category were placed patients who had constant pain on walking, constant limp, or inability to do two or more of the test activities, and those requiring triple arthrodesis or change of occupation in an attempt to relieve heel pain. Cases in the good and fair categories were classified as satisfactory results, whereas those in the poor results group were all considered unsatisfactory.

There has been considerable change in the methods of treatment in fractures of the os calcis during the past 10 or 12 years, but there has been relatively little in the literature regarding comparative long-range follow-up evaluation of the different methods

Os Calcis

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of treatment.[7] In Campbell's "Operative Orthopedics,"[5] it is mentioned that an analysis of the cases at the Campbell Clinic was done by Drs. Speed and Stewart; they were gratified and surprised by the satisfactory nature of function in old cases of fracture of the os calcis. Our experience was similar to their findings in that many patients who seemed considerably disabled at time of dismissal from active medical care seemed later to regain much better function, to have less pain, and to be able to continue an active occupation. This review indicates that it may take two or three years to reach maximum functional recovery following os calcis fractures.

It was the treatment policy in this Clinic to immobilize undisplaced fractures in a plaster cast for four to six weeks, followed later by gradual restoration of weight bearing, depending upon location of the fracture and degree of healing (Fig. 1). Thirteen of the patients reviewed were so treated and, as one would expect, all showed satisfactory results.

Patients who had a fracture of the body of the os calcis with loss of the tuber-joint angle, but apparently without any gross disturbance within the posterior articular facet, were treated either with the pry-pin method or with the Bohler two-pin fixation, followed by plaster cast immobilization. After six weeks, the cast and pins were removed and an additional period of four to six weeks of non-weight bearing mobilization was observed before allowing gradually increasing weight bearing (Fig. 2a and b). In eight cases so treated, five obtained satisfactory results.

Palmer's technique,[4] using open reduction in the treatment of fractures of the os calcis and involving displacement of the posterior facet, was used in 13 of the patients who responded to the questionnaire (Fig. 3a and b). Ten of these patients showed satisfactory results.

In ten cases in this study, the os calcis had such extensive comminution that it was believed there was no chance of restoring satisfactory anatomy by

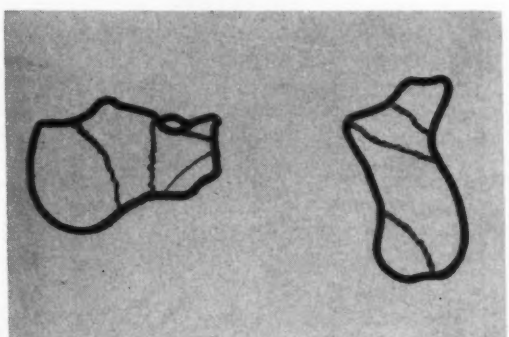

Fig. 1. Types of undisplaced fractures of os calcis treated only by immobilization in a cast.

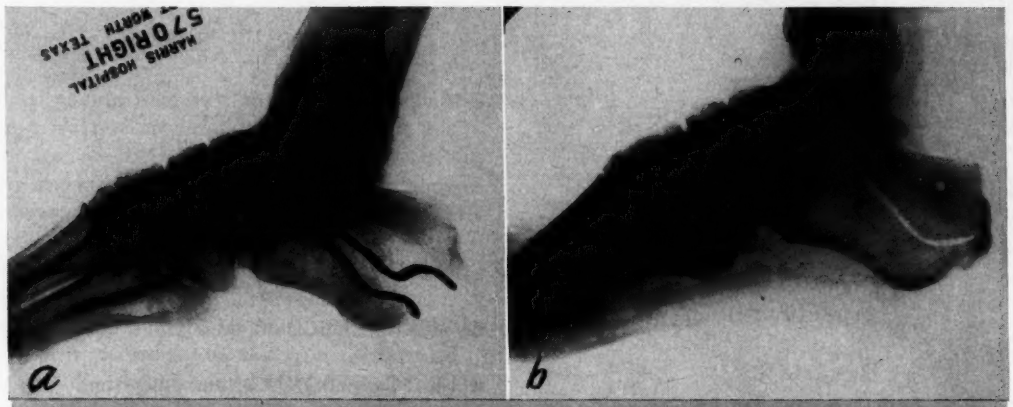

Fig. 2a. Beak fracture of os calcis extending into subastragalar joint. Back is slightly opened proximally with resulting angulation of part of posterior articular surface of os calcis. **b.** Result following Bohler two-pin fixation reduction and immobilization in plaster.

open reduction or pin fixation. These cases were treated after the method described by Barnard and Odegard,[1] in which the heel is molded by closed manipulative methods, sponge rubber is packed around it, and a walking cast is applied throwing the weight forward to the metatarsal area and relieving weight bearing on the heel (Fig. 4). Five of these patients obtained satisfactory results. There were none that could be considered as good results in this category. Although many of the patients with fair results obtained poor anatomic position as visualized in the roentgenograms, late satisfactory restoration of function probably resulted from spontaneous subastragalar ankylosis.

Six of the 40 patients had sufficient pain in the heel and disability to necessitate change to an occupation requiring less standing or activity. Two patients had triple arthrodesis performed later, and both were included in the poor results category because of the necessity of subsequent surgery. No primary subastragalar fusions or triple arthrodeses were done in this group.

Maxfield,[3] Leonard,[2] and others, have previously emphasized that a decided improvement in functional results can be obtained by using the Palmer method of open reduction. We believe that the results in this long follow-up study corroborate such a finding. If the fractures and displaced posterior facet

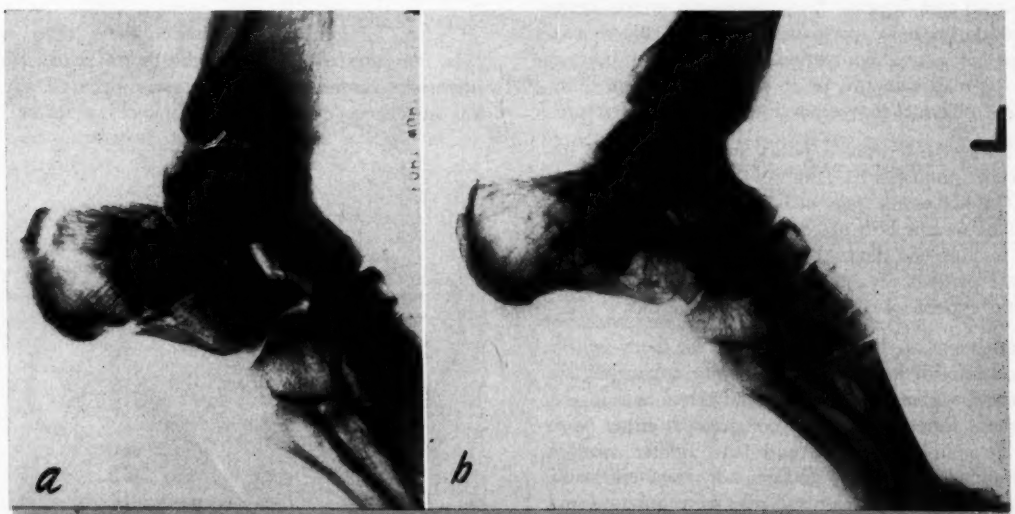

Fig. 3a. Comminuted fracture of body of os calcis with displacement of posterior facet. **b.** Postoperative view after open reduction. Accurate replacement of displaced facet using Palmer technique.

can be accurately restored, some degree of subastragalar motion should result. We think it is desirable to retain this motion if it can be done without too great a risk of pain and disability. In analyzing the patients who had open reductions, or those with pin fixation, it is evident that in both instances the more accurately the heel is restored to anatomic position and relationship, the better the results that can be anticipated. This finding was also noted by Widen in 1954.[7] The poor results in the group with open reduction were usually those in which a poor technical job was performed, or cases that were too comminuted; therefore, such patients were poor candidates for the open reduction method of treatment. In cases in which there has been compression and shortening of the longitudinal length of the os calcis, it is important to insert a pin transversely through the posterior part of the heel for downward and backward traction at the time that the articular facet fragments are elevated, so that proper length of the body of the os calcis can be restored. If this is not done, accurate reposition of the posterior facet is difficult or impossible, and the lever action afforded by the normal length of the os calcis is altered. The bone graft that is added, whether in one piece or in multiple fragments of cancellous bone, must be packed firmly into position so as to maintain the elevated facet fragments in position and prevent subsequent redisplacement. Occasionally a transverse screw is necessary to help maintain accurate reduction.

Regardless of the method of treatment, we doubt that immobilization of the heel for longer than six weeks is justified. We usually remove the cast at that time. If there has been any comminution, a period of non-weight bearing mobilization of the foot is enforced for another month to six weeks, then gradually increasing weight bearing is allowed.

There has been considerable discussion pro and con regarding presence of aseptic necrosis of fragments following fractures of the os calcis. In this regard we would like to mention two cases.

Case Reports

CASE 1.—A white male, aged 32, was seen by us approximately one year following severely comminuted fracture of both os calces. Because of his general condition and the severe comminution of the heels, treatment had consisted solely of closed manipulation and immobilization in a plaster cast. When the patient was seen in this Clinic, he was having considerable pain in the left heel on weight bearing. Roentgenographic investigation showed that some of the malunited comminuted fragments of the os calcis remained protruding downward toward the sole, forming spurs which were thought to account for his pain. Since this could not be relieved by special pads in the shoe, surgery was done for removal of the spurs. When the spurs were removed, the patient was found to have an extensive area of fragmentation and aseptic necrosis extending from the tuberosity forward on the plantar surface of the os calcis. A number of aseptic necrotic fragments of varying size were removed. After operation the pain that the patient had felt on weight bearing was relieved.

Fig. 4. Heel of patient with "squash" fracture of os calcis after treatment by closed manipulation and immobilization in plaster cast.

CASE 2.—The second patient also had complained of persistent pain under the os calcis on weight bearing. Roentgenograms revealed a spur, or comminuted fragment, projecting downward toward the sole. At the time of surgery, the spur was removed and several aseptic necrotic fragments near it were removed from the plantar surface of the os calcis.

Following fractures of the os calcis, most pain is localized to the subastragalar area, sinus tarsi, or midtarsal area. Pain is usually produced by inversion-eversion movements or weight bearing on the forefoot. Walking on the heel with the foot dorsiflexed is usually surprisingly painless. When a patient with a healed os calcis fracture complains of pain under the heel on weight bearing, the examiner should be particularly vigilant in looking for areas of aseptic necrosis under the os calcis, or for spurs that project downward into the sole from the undersurface of the os calcis. Such patients as the two cited can be simply relieved of symptoms by excision of the spurs and the aseptic necrotic fragments without performing triple arthrodesis.

Discussion

This series is much too small to allow any absolute conclusions to be drawn. We believe that it is large enough, however, to help indicate errors in the past and to point in the general direction of improvement in the future.

In this study, including all types of treatment, 29 of the 40 patients obtained satisfactory results. This is decidedly better than we had expected to find after reviewing the status of these patients at the

time they were dismissed from active care. Nevertheless, an effort should be made to improve the number of good results. It is obvious that little is necessary to improve the results from undisplaced fractures, since all of these patients regained satisfactory function. Attention must, therefore, be directed to those patients requiring open reduction, pin fixation, or to those with extensively comminuted fractures. Since the results obtained with the pry-pin

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method were the poorest in our experience, its use has been discontinued in favor of the Bohler two-pin fixation method to restore proper tuber-joint angle to those fractures of the posterior part of the body of the os calcis not involving the posterior articular facet. Open reduction of those fractures entering and/or causing displacement of the posterior facet is recommended. The importance of obtaining proper anteroposterior length of the os calcis is stressed, along with accurate restoration of the normal anatomic relationship.

Since the method of closed manipulation and cast in severely comminuted fractures resulted in only five satisfactory results, we must agree with Thompson and Friesen[6] that the functional results in such fractures would be significantly improved by the utilization of primary triple arthrodesis. This method of treatment should be reserved for the cases that do not qualify for open reduction and facet reconstruction. It is hoped that after such a treatment program is used for several years, analysis of long-term follow-up results will yield a better percentage of satisfactory results.

Summary

An analysis is presented of 82 cases of fracture of the os calcis with follow-up information on 44, averaging 5.4 years from date of fracture. To obtain the most satisfactory results, the treatment must vary according to the type of fracture, amount of displacement, and involvement of articular surfaces. Accurate restoration of length, position, and relationship of the os calcis is essential for best results. Improvement is to be expected in many cases for as much as two to three years following treatment. In a few cases, removal of aseptic necrotic fragments and spurs from the plantar surface of the os calcis will help to relieve pain.

Analyses such as this should be helpful in deciding proper methods of treatment, and thereby obtaining satisfactory results in a larger number of cases.

REFERENCES

1. Barnard, L., and Odegard, J. K.: Conservative Approach in Treatment of Fractures of Calcaneus, J. Bone & Joint Surg. 37-A: 1231 (Dec.) 1955.
2. Leonard, M. H.: Treatment of Fractures of the Os Calcis, Arch. Surg. 75:990 (Dec.) 1957.
3. Maxfield, J. E., and McDermott, F. J.: Experiences with Palmer Open Reduction of Fractures of Calcaneus, J. Bone & Joint Surg. 37-A:99 (Jan.) 1955.
4. Palmer, I.: Mechanism and Treatment of Fractures of Calcaneus; Open Reduction with Use of Cancellous Grafts, J. Bone & Joint Surg. 30-A:2 (Jan.) 1948.
5. Speed, J. S., and Smith, H.: Campbell's Operative Orthopedics, ed. 2, St. Louis, C. V. Mosby Co., 1949.
6. Thompson, K. R., and Friesen, C. M.: Treatment of Comminuted Fractures of Calcaneus by Primary Triple Arthrodesis, J. Bone & Joint Surg. 41-A:1423 (Dec.) 1959.
7. Widen, A.: Fractures of the Calcaneus, Acta Chirurgica Scandinavica, Supp. 188, 1954.

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Can our nation afford medical care for citizens who can provide for their own needs? If one group, the aged, is given this care, there will be no end to demands for further benefits. Considering the needs of both the aged and the wage earner . . . .

What's Best?

CONTROVERSY is everywhere in the news today—from Cuba, the Congo, and Laos to cosmonauts, price-fixing, and patriotic societies.

For most of us it is difficult to find out and to know the truth about these controversies. We read the headlines about these news items and maybe a few paragraphs of the news stories. We do not have the time, or perhaps the tenacity, to get beneath the surface of these controversies.

But one controversy that is pertinent to the medical profession is the current question of how medical care for the aged in our nation shall be financed.

I do not intend to be impartial in this controversy. My aim, however, is to tell what the American Medical Association favors, supports, and promotes in the way of a program for financing medical care for the aged, and to explain what we oppose and why we oppose it.

Let's begin with the latter.

We vigorously oppose the principle of supplying health care benefits to all the aged, regardless of their financial need, through the social security system as proposed in the Forand bill of the past three years, the King bill in the present Congress, and numerous other variations of the same theme.

All of these proposals are *compulsory,* irreversible schemes to provide *some* health care benefits for *some* of the nation's aged. For example, the current plan called the King bill is not a health care plan for the aged even though its proponents call it that. The bill would provide only hospitalization and nursing home care for a segment of the elderly—those covered by social security. It denies even these limited services to the millions of poor and destitute who can never qualify for social security. Furthermore, it favors the rich at the expense of the poor by compelling wage-earners to pay additional social security taxes to provide these services for millions who can well afford to pay all of their own medical expenses.

For these reasons, and others, I believe that the American people are being misled and are being given a false impression about this entire proposed program of financing medical care for the aged. It is time for the proponents of this legislation to be truthful in describing it. I think this applies to Department of Health, Education, and Welfare Secretary Ribicoff, to AFL-CIO leaders, and to the Socialist party—all proponents of the King bill.

These proponents are hoodwinking the American people by referring to their plan as "a program of insurance for future benefits" and "a life policy of paid-up medical insurance." It is neither, and there is no foundation for these inaccurate statements. The Supreme Court has ruled that social security is not insurance and that contributions to it are taxes, not premiums. The social security system is just a redistributive tax plan whereby today's wage-earners, and their employers, are taxed to permit payment of benefits to today's retired and disabled and their dependents. As representatives of the Social Security Administration have said, the security of the plan rests, in the final analysis, upon the taxing power of the U. S. government and the willingness of the people to have it exercised.

It is deliberately misleading the public to call social security "insurance", to call contributions "pre-

Dr. E. Vincent Askey is the immediate Past President of the American Medical Association. He presented this paper at a general meeting of the Texas Medical Association April 25, 1961, in Galveston.

miums", to say that those under social security have "rights" because they have paid, to liken it to an "insurance policy", or to say it is "time-tested" and "tried and proved". Actually, it is going in the red, it has not met the test of time, and its crucial tests lie ahead when the number of beneficiaries reaches a peak in 20 years or so. With approximately $20 billion in the trust fund and more than $360 billion in future obligations, there are many congressmen who believe that to tie any health care plan to social security might bankrupt the system.

Administration advisers also are unrealistic in their estimate of $1.1 billion as the first year's cost of the King bill. Health insurance statisticians estimate the initial cost of the program at $2 billion and predict that the cost within 20 years would climb to $5 billion. Add to this the amount that would be necessary if the program were extended to new groups and expanded in its benefits, and the inevitable cost to taxpayers would be staggering.

No End In Sight

I do not believe for one minute the claim that this bill would not be expanded or extended, if passed, even though some proponents have weakly indicated that this would be the case. There is too much evidence to the contrary.

For example, former Rep. Aime Forand has said: "If we can only break through and get our foot inside the door, then we can expand the program after that." An AFL-CIO lobbyist also has said that once the Forand-type legislation was passed, "We will come back for more and more and more." Mr. Ribicoff said at his first press conference that the Administration wants "to confine its health care legislation *this year* to persons who receive social security and railroad retirement benefits. Their own statements leave little doubt about what these people have in mind for America in the future—the not so distant future.

Mr. Ribicoff and the others also deny that the King bill is socialized medicine. As a physician, I say that any program which calls for a system of compulsory health care, which is controlled and regulated by the federal government, is socialized medicine for that segment of the population which it serves.

Socialists Ought To Know

I emphasize here that at least the Socialist party is telling the public the truth on this particular issue of terminology. The Socialists have made it clear that their party supports the King bill as the vehicle with which to bring full-blown socialized medicine to this country. They say: "Yes, the Forand bill (the King bill is similar) is socialized medicine." As Socialists they ought to know what socialized medicine is.

I think Mr. Ribicoff bases his denial that the bill is socialized medicine on the contention that the bill does not include doctors and does not pay their services. Again, he is willfully misleading the public. The bill definitely includes doctors. It includes interns, residents and those physicians serving the hospital's outpatient clinics. It also specifically includes pathologists, radiologists, physiatrists, and anesthesiologists working in the hospitals.

Mr. Ribicoff also states that the provisions of the King bill offer free choice of hospital and physician. The fact is that only hospitals signing contracts with the government would be available to patients. If the only hospital in a community were not approved by the Secretary of HEW, patients in that community would be forced to seek hospitalization in some other city. That would not afford free choice of hospital. If the patient's physicians were not on the staff of the other hospital, the patient would be denied free choice of physician.

I challenge Mr. Ribicoff to deny that these are the facts.

Instead of emotional appeals to the aged, the American public needs the sober facts upon which to judge this proposal intelligently.

The King bill proposed by the Administration's advisers would unnecessarily tax the young wage-earners so that millions of self-supporting elderly people, including retired executives enjoying their company pensions and tax-free social security, could also enjoy free hospitalization and nursing home benefits.

Those pushing the King bill are exploiting not only the wage-earners of this country, but the wage-earner's children. To tie the King bill to social security would create a permanent debt on which new entrants to the labor force and their employers would have to pay interest forever.

Can We Unscramble Eggs?

Our nation must not get involved in this kind of a financing scheme for medical care to any segment

of our population. If we do, we will find ourselves asking: "How do we get out of this?"

In a recent conversation about the British Health Service, an English industrialist was asked this same question. His answer was this: "Oh, that's easy. How do you unscramble eggs?" His implied advice was obvious: Don't scramble the eggs in the first place.

How, then, shall we finance the health care of the aged if social security medicine is not the answer?

Use Laws In Effect

The American Medical Association believes that we should make full use of the better alternatives already at hand—the Kerr-Mills Medical Assistance to the Aged Act for the needy and near-needy which became the law of the land last fall, and the new, improving voluntary health insurance plans for the aged which are being promoted throughout the nation.

Of course, advocates of the social security approach contend that voluntary health insurance has failed the older people and that it cannot do the job. However, the same thing was said about voluntary health insurance a decade or so ago when a national compulsory health scheme was proposed by the Administration. Voluntary health insurance proved this argument to be false because today approximately 130 million Americans are covered by health insurance plans.

Officials with voluntary health insurance plans—which already provide some form of protection to at least half of the people over 65—are intensifying their efforts to increase and improve coverage for the aged.

The King bill of social security medicine is absolutely unnecessary because of the Kerr-Mills Medical Assistance for the Aged Act, passed by Congress last fall and strongly supported by the A.M.A.

We doctors have pledged ourselves to help those aged who need help, but we do not believe that tax dollars should be used to finance the medical and hospital expenses of those who are perfectly able to finance the cost of their own care.

That is why the A.M.A. is seeking the immediate implementation of the Kerr-Mills Act in all states. This law provides broad medical care benefits for those persons over 65 who need financial assistance. It covers both the indigent and the near-needy —those who can take care of the usual day-to-day living expenses but who would have difficulty meeting high bills resulting from long or serious illness.

In short, the purpose of this law is to help those who really need help—when they need it, as often as they need it, and in the full amount required—regardless of their status in the social security system. Furthermore, this is a voluntary program, not compulsory. It is administered by the states, not the federal government. The various state legislatures draft the enabling legislation based on local needs.

Already the Kerr-Mills program is being implemented at a faster rate than any grant-in-aid law in our nation's history.

Eight states and two U. S. possessions already have the Kerr-Mills Act in effect, and thousands of needy aged have benefited from the law. Eight states also have enacted legislation; fourteen others have introduced legislation, and two have drafted measures to implement the program. This is remarkable progress considering the fact that the law is only six months old.

This new program now is operating in 12 states. Fifteen other states, including Texas, have passed enabling legislation.

To me, it is inconceivable that anyone would promote another proposal before the Kerr-Mills law is given a chance to prove itself. It is even more inconceivable for anyone to be pushing for the same type of social security measure that was defeated last year by Congress.

The senators and representatives passed the Kerr-Mills Act last year in preference to social security medicine. This was the decision of both houses of Congress, and I believe that the law should have the opportunity to do the job as the lawmakers envisioned.

The AFL-CIO, the granddaddy of all lobbies, and a host of government employes including the HEW Secretary are lobbying *against* the law of the land and *for* a proposal that was defeated only six months ago. The leaders of organized labor and certain HEW employes should abandon their negative attitude toward the Kerr-Mills law. They should join the positive action of the A.M.A. in helping to implement the program so that the hopes of the nation's needy and near-needy aged can be fulfilled. After the program is effective and working, we find weaknesses or deficiencies, then improve and strengthen the law on the basis of experience.

While this is being done, the American people also can be assured that there will be rapid progress by medical societies, Blue Cross, Blue Shield and the private insurance companies in developing especially-tailored, voluntary health insurance for those over 65 years of age. This progress will include new types of coverage which will continue after retirement.

The Kerr-Mills program and private prepayment plans—both voluntary and both complementing one another—can solve the problems of health care costs for our senior citizens.

This, I firmly believe, is the course of reason and common sense.

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ocular diagnosis

John W. Henderson, M.D.

IN THE ALL-INCLUSIVE field of general practice, the average physician occasionally is required to practice ophthalmology. However, of all the medical disciplines to which the man in general practice is exposed during his training, it is likely that he knows less about ophthalmology than any of the other specialty fields. Furthermore, it requires some time to learn the intricacies of such instruments as the ophthalmoscope, slit lamp, retinoscope, and perimeter. Therefore, the general practitioner must rely on what he can see with the naked eye and on what he can hear of the symptomatology to arrive at a tentative diagnosis.

Regardless of either the amount of ophthalmic training the physician has absorbed, or his wish to dabble in ocular therapeutics, the general practitioner still is called on to advise an anxious patient concerning some ocular problem of recent onset. This is particularly true in the Midwest where the distance to an urban community where specialists congregate may be great. In addition, the patient is often a farmer, a dairyman, or a rancher—occupations wherein it is not always easy to discontinue duties and rush into a large city many miles distant. Particularly is this true in occupations dealing with animals. How often is heard a statement by a patient to the effect that he cannot follow treatment simply because he must return home quickly, for there is no one to take care of the stock.

And so the physician in general practice often accedes to the patient's wish for some soothing salve or collyrium and allows the patient to return home rather than urging him to seek a specialist's advice concerning the ocular problem. Often the general practitioner does not have any idea as to the seriousness of the ocular condition but hopes that it will resolve satisfactorily with passage of time. If it does not, then he feels that he has done everything possible and insists that the patient go to see an ophthalmologist.

As a possible help to physicians who find themselves in this dilemma, I wish to discuss certain ophthalmic clues to diagnosis that may aid in differentiation of a serious from a nonserious problem.

Ocular Pain and Discomfort

Herpes Simplex Keratitis.—A problem of increasing importance to ophthalmology is the invasion of the cornea by the herpes simplex virus. This virus is identical to the agent that causes the familiar "cold sores," "fever blisters," and "gum boils" of the lips and mouth. Many people are subject to attacks of this virus on the mucosa of the lips and mouth. A much smaller, but increasing, number of people are victims of the invasion of the cornea by this virus. Whereas on the lips and in the mouth the herpes usually runs a relatively benign and self-limited course, on the eye the course may be prolonged and destructive. A major factor that contributes to the latter situation is the promiscuous use of ocular medications containing one of the steroid drugs. Almost every new medication for ocular application contains one of the steroid compounds. The steroids seem to inhibit the natural forces of immunity that the patient may possess toward the virus, the virulence of the organism seems to be enhanced, and the end result is a prolonged attack of keratitis resulting in some permanent disturbance of vision as the result of corneal scarring.

Unfortunately, medical research has not discovered a cure for this disorder. Although the instillation of atropine to put the eye at rest and the use of certain cauterizing agents by ophthalmologists will be of help in some cases, it is known that some

General practitioners in rural areas are called on to treat some patients with eye conditions. This paper distinguishes between conditions requiring immediate care by a specialist and those that will subside spontaneously without serious harm to vision. Avoidance of drugs containing steroid hormones is emphasized.

lesions will heal spontaneously if nothing is done, providing a medication containing a steroid drug is *not* applied to the eye. The crux of the matter is to avoid the use of the steroids at all costs.

Because the ocular symptoms at the time of invasion by the virus may seem rather minor, many patients go to a general practitioner first rather than to an ophthalmologist. Soon after onset the patient will state that a foreign-body sensation is present, a symptom which actually is due to the eyelid rubbing across a tiny ulcer on the corneal surface. He will not be able to relate the onset of this sensation to any particular injury. On questioning, the examiner can often elicit a history of recent exposure to some external irritant (prolonged exposure to sunlight, such as is reflected from a body of water; undue exposure to wind, such as driving a car with an open window; extensive contact with dust and dirt from the fields and farmyards), or a recent bout of oral herpes secondary to a respiratory infection.

Accompanying the sensation of foreign body, the examiner will note some photosensitivity, moderate lacrimation, and slight congestion of the affected eye. However, even with close scrutiny a foreign body, either on the surface of the eye or beneath the eyelid, will not be found. Even with topical dyes the tiny telltale dendritic-shaped ulcer on the cornea will not be visible; only with special instruments can it be detected. In short, the situation will be one of "foreign-body sensation without foreign body."

At this stage of affairs, the patient is usually given a salve or collyrium containing a steroid drug, and is dismissed with a diagnosis of minor ocular irritation. Unwittingly, by prescribing the use of the "steroid," the physician has set off a chain of events that may result in a 3 to 4 week period of disability and a permanent disturbance of vision. If some drug must be prescribed, 10 per cent sodium sulfacetamide seems as good as any. It does not destroy the herpes virus; on the other hand, it does not enhance the virulence of the invader. It probably offers reasonable protection against secondary contaminants. Patching the eye during the waking hours will minimize the sensation of foreign body and will help to protect the eye from the external irritants that so often trigger off, as well as aggravate, an attack of herpes. Above all, the general practitioner should be on the alert for the patient with the "foreign-body syndrome without foreign body" and should avoid treatment with substances containing steroids.

Recurrent Erosions of the Cornea.—The chief symptom of this disorder of the cornea is a sensation of foreign body without an apparent reason. The sensation may be described as a tearing, sticking, or sharp stabbing pain in the eye and usually occurs at or about the time the patient gets out of bed in the morning. Inspection of the eye will fail to reveal the source for such a vividly described disorder, and actually, the symptom may have abated by the time the patient reaches the physician's office. The disorder recurs at irregular intervals, and the patient may state that the situation has been going on for several months. Women seem more prone to this disorder than men. Closer questioning of these people usually will reveal an almost-forgotten, minor scratch of the affected eye. These scratches are often the result of contact with a child's fingernail, the edge of a paper sack or newspaper, tomato vines, or tree branches. The instillation of a local anesthetic, either at the hour of sleep or at the time of the occurrence of the symptoms, usually will suffice. After several months, the disorder seems to disappear. This is not a serious ocular-pain syndrome, and the patient does not need to feel that there is any urgency for special ophthalmologic consultation.

Disturbances of Vision

Halo and Rainbow Vision.—From their courses in ophthalmology during medical school, all physicians probably remember that one of the symptoms of glaucoma is so-called rainbow or halo vision. The visual phenomenon is due to corneal edema which is brought about by a sudden increase in the intraocular pressure. The medical profession is aware of the serious nature of this symptom and does a good job in urging the patient to seek ophthalmic advice. The public, too, is aware of the implication of this symptom by reason of the increased publicity given to glaucoma in lay magazines in the past 10 years. Neither the public nor the physician in general practice, however, is aware that another ophthalmic condition may cause similar symptoms. This second disorder is the nuclear sclerosis of the lens that comes about as a physiologic change with age.

Because of the tremendous boost in the percentage of our population past 70 years of age, the incidence of nuclear cataract has increased in the last two decades and with it the frequency of halo vision. Whereas in one condition, glaucoma, this symptom indicates the need for rather urgent treatment, in the other disorder, nuclear cataracts, the patient need not feel that this visual phenomenon will lead to blindness. The specialist can easily distinguish between the two troubles by using tonometry and ophthalmoscopy. However, these diagnostic tools are not usually utilized in general practice. How, then, can these diseases be distinguished on the basis of subjective symptoms?

In both disorders the halo and rainbow effects are caused by an obstruction to the passage of light through the media of the eye. In glaucoma the suddenness of onset will be noted by the patient, and usually there is no preceding history of visual disturbance. If pain or discomfort is present, this is a helpful clue; but, unfortunately, the rise in intraocular pressure may not always be sufficiently acute to produce pain. If pain is present, the eye will look congested; however, if pain is absent, the globe may look white. Use of the standard visual test cards at both near and distant ranges will show a rather proportional fogging of acuity. The patient usually will comment that the source of the visual phenomenon will be a nearby house lamp, light bulb, or street lamp. The phenomenon will consist only of a peripheral ring of rainbow hues.

With nuclear sclerosis the patient usually is aware of some visual dimming for some time prior to the halo vision. Pain or discomfort is absent. Use of the visual test card will reveal a definite reduction in distance acuity, but the patient will read surprisingly fine print at near range. He may even mention that he can read better without glasses and may demonstrate amazingly sharp sight by holding the test card very close to the eyes. This mannerism is often referred to as "second sight." The source of the halo effect generally is some illumination at some distance from the individual. A halo or "doubling effect" of approaching car lights is the most frequent statement. The color phenomenon is not so definite as that noted by the patient having glaucoma. Instead the patient may observe a peripheral halo or reduplication of the light source even to the point of noting double or triple images. Awareness of this latter disorder may eliminate the need of rushing a worried patient for emergency care.

Other Entoptic Visual Phenomena.—The patient's description of what he sees often will provide a diagnostic clue to the nature of the ocular disorder. The commonest disturbances are floaters and spots that seem to appear sometime during the middle years. These spots are usually described as black and they vary considerably in size and configuration. In practically all people the spots and floaters move about in the visual axis and seem most annoying when attempts are made to read. Seldom are these floaters a continuous annoyance, but they seem to appear more readily when the patient is fatigued and when the illumination reflects a certain way from the reading material. These phenomena are caused by imperfections in the vitreous and have no pathologic significance. In the average patient a simple explanation as to the nature of the floaters usually will suffice, but if the individual is one who continues to complain bitterly of such a disorder or regales you with vivid descriptions of new floaters, this may be the initial clue to some psychiatric problem.

There are several disorders that may be associated with the presence of "lightning streaks" and "light flashes." Sudden momentary flashes of bright light may be noted in the temporal field of 1 eye. The appearance of these flashes will follow a rather haphazard pattern. Occasionally, the patient can relate their occurrence to sudden movement of the head or eyes, or to a change in body position, such as walking down a flight of stairs. The flashes are caused by a tugging of the vitreous at its attachment to the peripheral retina. Although it is claimed by many authorities that the onset of these phenomena may portend an ultimate detachment of the retina, it is my experience that these flashes rarely are associated with any serious intraocular disease.

Lightning flashes or streaks also may be noted by people who are having attacks of ocular migraine. Here again the visual disturbance may be localized to the temporal field of vision, but the patient is usually unaware that the phenomenon has a homonymous pattern rather than being confined to one eye. In contrast to the patient with lightning flashes of vitreous origin, the patient with this type of migraine almost always describes some other bizarre visual disturbance, such as pulsation of the light, rapid changes in hue and intensity (scintillation) of light, "heat waves," or actual, but temporary, hemianopsia of words or other printed matter. Whereas the former patient has only a momentary, but fairly frequent, disturbance of vision, in the latter patient

Dr. John W. Henderson of the Mayo Clinic's Section of Ophthalmology presented this material as a refresher course April 24, 1961, during the Texas Medical Association's Annual Session in Galveston.

the phenomenon may last some minutes but seldom recurs oftener than once every several months. Since the patient with ocular migraine may not have the usual headache, it is important to recognize these manifestations of abortive migraine so that the patient will not be alarmed about impending ocular disease.

In general, these entoptic phenomena are not serious enough to necessitate a hurried consultation with a specialist.

Sudden Loss of Vision

Whereas the sudden loss of sight of both eyes is usually of such frightening importance to the patient as to require the immediate attention of a specialist, loss of vision of one eye in some of the more stoical individuals is not of such magnitude that the patient will wish to consult with a specialist unless advised to do so by his family physician. Sudden and complete loss of vision in one eye without other symptoms of ocular dysfunction or pain usually is due to some disorder of the retina or optic nerve.

Detachment of the retina is a common and serious cause of unilateral visual loss. The chief symptom is so typical that it is often possible to make a diagnosis without ophthalmoscopic examination. As a rule the patient states that a "curtain" or "veil" has suddenly come across a portion of the visual field. A history of trauma is not necessary to support such a diagnosis, for there are many individuals with high myopia who may experience a sudden retinal separation without apparent cause.

Extensive hemorrhage into the vitreous cavity from one of the retinal vessels may occur alone or may precede a retinal detachment. Patients who have noted such a hemorrhage often remark that a reddish-black "glob" or "stringy veil" slowly obstructs their vision and within a period of several minutes the entire visual field is covered.

A fairly rapid impairment of central vision that may progress to almost complete loss of field in several days is frequently due to an inflammatory process in the optic nerve. Some patients will have no other symptoms; others will note a slight discomfort on rotation of the affected eye.

Because more people are living beyond the age of 60 years, we are encountering an increasing incidence of visual loss in one eye due to some interference with the vascular channels of the eye. Obstructions of either the central retinal artery or central retinal vein are sudden. In some cases the patients awake to find that the vision has "blanked out" in one eye. In the case of obstruction to the arterial supply, the visual loss is almost instantaneous, complete, and irreversible. In the case of obstruction to the venous flow, the loss of vision is not so complete, and the patient may still recognize movements of the hand or of objects in the far periphery of the visual field.

A condition closely related to occlusion of the central retinal artery and one which also interferes with vascular flow to the eye is temporal arteritis. Before the final blackout of vision occurs, many of these patients will have some premonitory warnings in the form of pain in the jaw on mastication, severe headache, unexplained fever, and brief episodes of visual blackout.

Although the ophthalmologist may have little to offer in the way of treatment to patients with optic neuritis, obstructions of the central retinal vein and artery, and intraocular hemorrhage, early consultation and treatment are of great benefit to patients with detached retina and temporal arteritis. Early diagnosis and therapy in the latter disease are of particular importance because loss of vision in the other eye can be prevented. As a general theme, it seems well to recommend early ophthalmologic consultation for all people with the unilateral, sudden loss of vision syndrome.

Summary

The general practitioner in smaller communities of the Midwest and Southwest situated some distance from large urban centers frequently is asked to treat and advise patients with ocular problems. Many patients care for livestock on ranches or farms and are reluctant to be absent from such duties unless it is absolutely necessary. Although by reason of his training the physician does not feel qualified to offer advice, still he must do the best he can. It is important for him to be able to differentiate those ocular conditions which will result in serious harm to vision if immediate ophthalmologic help is not sought from those disorders that will subside spontaneously without loss of ocular function. Often he must rely on the subjective symptoms, for the instrumentation necessary to make a detailed examination usually is not available.

One of the most important of these ocular syndromes is foreign-body sensation without the presence of a foreign body. The physician is urged to have a high index of suspicion for herpes simplex infection of the cornea or conjunctiva, the increasingly common invader of the eye and, above all, to defer the use of topical medications containing steroid hormones. Avoidance of these drugs may protect the patient from one of the most destructive corneal diseases with which the modern ophthalmologist is faced.

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The same mite, Acarus Scabiei, causes both Norwegian and conventional scabies, but few of the former type of cases have been found in any but the mentally retarded. Such patients are poorly reactive to stimuli of any kind; if they reacted by scratching, as would other patients, their plight would be discovered and they would receive treatment. Two case reports of Norwegian scabies are given.

The Return of the ACARUS SCABIEI

C. H. McCUISTION, M.D.

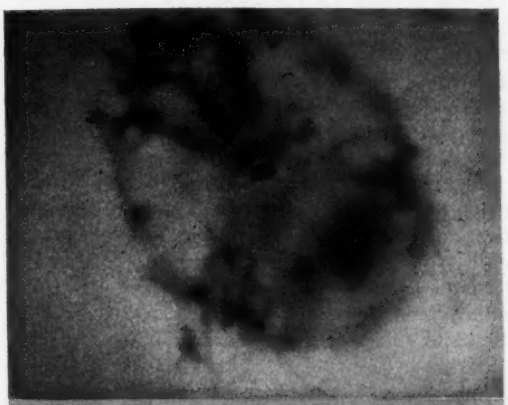
"THERE COMES A soldier—He cries, 'I am sick, my feet lame, my legs are sore, and my body is covered by this tormenting itch.' So Surgeon Albigence Waldo of the First Connecticut Regiment described one of the heroes at Valley Forge in the winter of 1777-1778.[1]

Until 1946—in times of war as well as during peace—scabies had been endemic in most areas over the world. At times, it had been epidemic. After the epidemic of 1948, the Acarus mite appeared to be sharing the fate of the dodo bird and the whooping crane. Epstein,[3] in 1955, questioned physicians from throughout the world. Their answer indicated a pronounced decrease in frequency of the condition, even in army personnel. Indeed, medical students were being graduated who had learned the diagnostic and therapeutic aspects of this disease only from textbook descriptions and the wistfulness of their mentors. In the author's own private and clinic practice, not a single case of scabies had been recognized since 1948. Certainly, it was this low index of suspicion that caused the embarrassing situation about to be described.

Thus, while physicians and patients were enjoying the seeming extinction of the Acarus mite, this wily subversive had merely gone underground. It is becoming apparent where at least some of the organisms have been hiding. Burks and co-workers[2] (1956), George[4] (1958), Sjogren[6] (1958), Maguire and Kligman[5] (1960), and the author's present cases show, embarrassingly, that scabies has been present all along, masquerading as "psoriasis", "keratodermia blennorrhagica", "tinea corporis", "pityriasis rubra pilaris", or other incorrect designation.

For an erudite resume of Norwegian scabies, the studies of Burks and his associates[2] are suggested. Maguire and Kligman[5] stated in 1960 that only ten cases had been reported in the American literature. However, it seems safe to assume that many times this number are to be found among the institutionalized mentally infirm in this or in any country.

It is generally agreed that the same mite, Acarus Scabiei, causes both Norwegian and conventional scabies. Very few (if any) cases of the former have been reported in any but the mentally retarded including Mongoloids and patients with degenerating



Photomicrograph of mite from nail scraping.

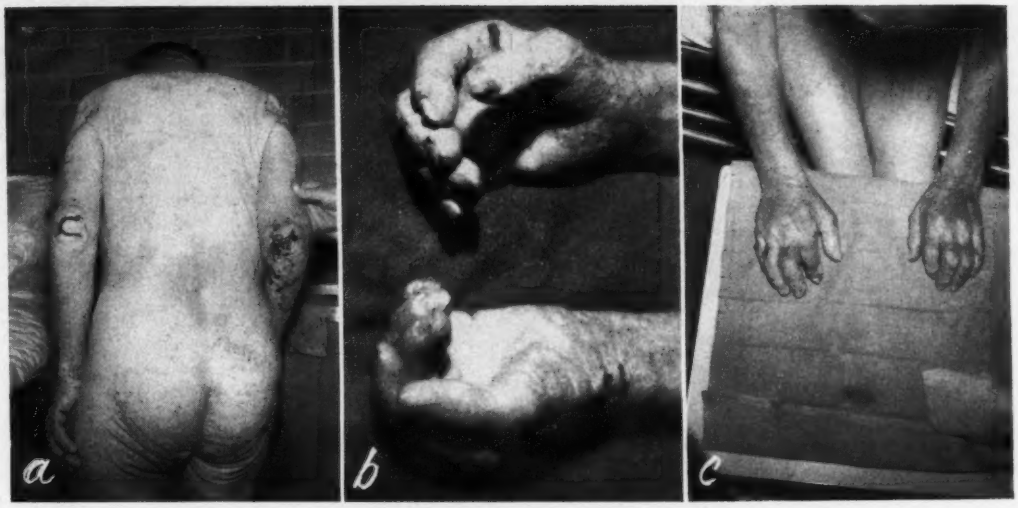


Fig. 1a. Case 1: Posterior view. Note severe hyperkeratoses and fissuring at elbows simulating keratosis blennorrhagica.

b. Case 1: Tremendous hyperkeratoses of palms and nails.

c. Case 1: Dorsum of hands. Feet and toenails showed similar changes.

Parkinson's Disease. The term Norwegian scabies has been retained since the first case was described in Norway in 1848 by Danielssen and Boeck.

Burks and his colleagues[2] question the long taught thesis that the pruritis of scabies is attributable to the burrowing of the mite. They state that large numbers of mites can burrow in the skin of a patient without producing any symptoms, and suggest that the onset of pruritis marks the establishment of a true sensitization of the patient to the mite. They quote Mellanby's work in which Sarcoptes extract was injected intradermally into three groups of patients:

Group 1: had never had scabies.

Group 2: had been infested with scabies less than three months.

Group 3: had been infested with scabies more than three months.

In Groups 1 and 2, there was no reaction at the site of injection. In Group 3, there was severe reaction with wheal, erythema, and pruritis. Burks[1] group tested several volunteers with Sarcoptes antigen and concluded that antibody reaction does occur, and that sensitivity becomes progressively greater in the untreated patient with passage of time—up to a point. However, no immunity is established, and after greater lengths of time, certain individuals may "lose their sensitization and tolerate the parasites without further reaction".

If this is the modus operandi of Norwegian scabies, the explanation is plausible. The author's patients, and most of those previously reported, were Mongoloids or were otherwise mentally retarded. These patients are poorly reactive to stimuli of any kind. It is possible that after the original infestation, the usual sensitization that Burks and coworkers described developed. Had the patients been normally reactive and aware of the itch stimulus, they would have scratched. By signs and symptoms, their plight would have been apparent to the medical personnel in charge, and they would have been treated. Instead, they stolidly and imperturbably passed into a stage of anergy and become scabies' version of Typhoid Mary. As if to any foreign body, the cutis reacts with a pronounced degree of hyperkeratosis. Direct microscopic examination of the debris from the thickened plaques or nails will show numerous mites and eggs.

This hyperkeratotic reaction is, as Burks stated, most severe at pressure or stretch areas of the body, that is, the extensor surfaces. This feature, along with the thickening of the nails, can mimic psoriasis or keratoses blennorrhagica to an amazing degree, especially if the examiner is convinced that scabies, like syphilis, is a thing of the past.

Dr. C. H. McCuistion, Austin dermatologist, presented this paper on April 24, 1961, before the Texas Dermatological Society in Galveston.

TABLE 1.—*Sites of Predilection in 900 Cases of Scabies.*

Site	%
Hands and wrists	63
Extensor surfaces of elbows	10.9
Feet and genitalia	9
Buttocks	4
Axillae	2
Sites elsewhere	2

To the author and to the writers mentioned previously, the message and lesson of one case of Norwegian scabies is clarion. Since the 2 present cases were diagnosed, 12 cases of conventional scabies have been diagnosed in the institutions concerned. Sjogren[5] reported 85 cases of conventional scabies after finding a single case of Norwegian scabies.

Mellanby (as quoted by Burks[2]) describes the incidence of sites of predilection in 900 cases of scabies (Table 1).

The author has often heard Dr. C. F. Lehman say that it is a waste of time to try to demonstrate the mite in any area except the hands and wrists. The incidences reported in Table 1 would bear him out.

Report of Cases

CASE 1.—L.P., a 53 year old Mongoloid male patient had been seen by the author during a period of many years. His chart shows astute diagnoses of psoriasis, keratosis blennorrhagica, pityriasis rubra pilaris, and, finally, tinea corporis with severe onychomycosis attributed to T. Rubrum, which was isolated. Accordingly, the patient was included in the author's first studies of griseofulvin. He improved rapidly with use of the drug, up to a point; then even tripling the dose brought no further response. In light of further development and the necessity of reporting this dermatologic menagerie again, the author is delighted that in the earlier paper on griseofulvin, this patient was reported as a partial treatment failure.

After the patient had dropped from sight for more than a year, he was seen again at the Austin State Hospital clinic. The laboratory technician was asked to search again for fungus, and reported that the patient's disease was scabies.

The patient was treated with soaks of potassium permanganate solution, 1-7,000, mechanical debridement, and daily application of benzyl benzoate, 36 per cent (zylate). Fifty per cent improvement was noted within one week. Within a month, the only residual signs were the still thickened finger and toe nails, scrapings from which abounded with Acarus mites and eggs. At this writing, the nails are being abraded with a dental burr twice weekly and 10 per cent sulfur ointment is applied twice daily. Regarding this patient, it is concluded that griseofulvin is not an efficient scabeticide.

CASE 2.—A.K., age 46, was a Mongoloid female patient. After the author learned the lesson from Case 1, he alerted physicians of the other state eleemosynary institutions in Austin and requested that they send any questionable cases to the Dermatology Clinic.

A clear history in Case 2 was not available, but apparently, the patient had been infested for more than a year. Treatment as outlined in Case 1 was given, except that a solution of 12.5 per cent benzyl benzoate and 1 per cent Topocide was used. Therapeutic response was equally dramatic.

Summary

Two cases of Norwegian scabies in Mongoloid patients are reported. The clinical similarity of this condition to diseases such as psoriasis, pityriasis rubra pilaris, keratosis blennorrhagica, and tinea corporis with onychomycosis is misleading, especially if there is a concomitant lowered index of suspicion for scabies. Most cases of Norwegian scabies that have been reported have caused numerous cases of conventional scabies to be found in other patients, attendants, nurses, and physicans.

The treatment of scabies is reviewed.

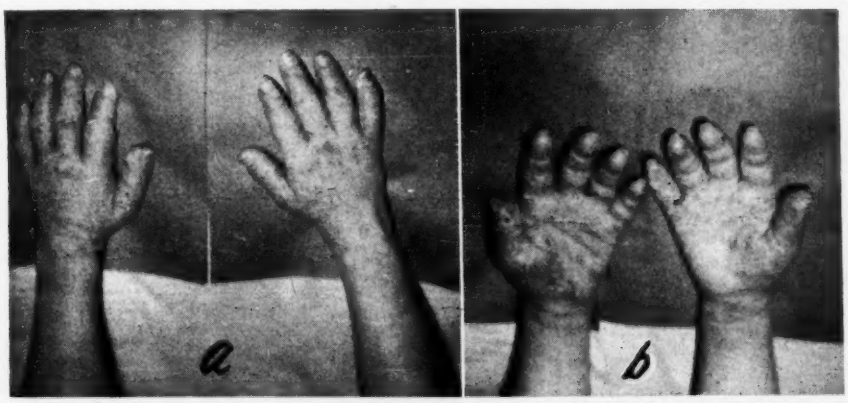


Fig. 2a. Case 2: Severe hyperkeratoses and thickening of the nails, closely resembling onychomycosis.

b. Case 2: Scrapings from nails of both Case No. 1 and Case No. 2 showed a tremendous number of mites and eggs of Acarus Scabiei.

The patients reported herein were seen at the Austin State Hospital Dermatology Clinic, and were from the Austin State Farm Colony (Case 1) and the Austin State School (Case 2).

The author is indebted to Dr. Sam Hoerster, Superintendent of the Austin State Hospital; to Mr. Curtis Phipps for the photographs shown herein; and, especially, to Mrs. Nan Dakin, technician, for diagnosing the cases for him.

REFERENCES

1. The American Heritage Book of the Revolution: American Heritage Publishing Co., Inc., p. 218.
2. Burks, J. W., Jr., et al.: Norwegian Scabies, Arch. Dermat. & Syph. 74:131 (Aug.) 1956.
3. Epstein, E.: Trends in Scabies, Arch. Dermat. & Syph. 71:192 (Feb.) 1955.
4. George, W. M.: Norwegian Scabies, Arch. Dermat. & Syph. 78:320 (Sept.) 1958.
5. Maguire, H. C., Jr., and Kligman, A. M.: Norwegian Scabies, Arch. Dermat. & Syph. 82:116 (July) 1960.
6. Sjogren, G.: Transactions, Swedish Derm. Soc. for 1957, Acta Dermato-Venereologica 38:333, 1958.

New Roentgen-Ray Technique for Infants "Almost Perfect"

A new technique for making roentgenograms of infants has proved almost 100 per cent accurate, a report in *Medical News* says.

Investigators of the Children's Clinic, University of Cologne, Germany, designed the new system to overcome the problem of faulty pictures which made repeated radiation exposure necessary.

Dr. V. Weidtman reported the technique recently to the International Conference of Medical Electronics. In the four months the new technique had been used in the clinic, he said that out of 250 roentgenograms less than one of 100 has been unusable. Before then, it had been necessary to discard 9 to 12 roentgenograms per month.

The technique is based on electronic synchronization of roentgenographic exposure with the infant's respiratory cycle. A device records the baby's respiratory pattern, picked up by a graphite-filled Hesse strain gauge. The gauge is placed around the abdomen in babies and smaller children because their respiration is usually of the abdominal type. In older children, the strain gauge encircles the thorax.

Variations of the electrical resistance caused by the respiratory movements are amplified by a vacuum tube and transmitted to a recording instrument.

Dr. Weidtman recommends a careful and adequate period of observation to make certain that the breathing pattern, especially erratic in infants, has been captured. When the pattern has been ascertained, the instrument is set at the point of deepest inspiration. As soon as the infant again reaches this point of deep inspiration, the circuit is automatically closed by a switching mechanism and, simultaneously, the roentgenogram is taken. A thyratron is used in the switching process to avoid delays.

By utilization of a dipole arrangement, the instrumentation can be adapted to expiration as well as to inspiration points, Dr. Weidtman said. Thus, a fairly perfect diagram of the infant's respiratory pattern can be obtained.

Doctor's Own Words Can Be Downfall

IN THE TRIAL of a law-suit, especially a law-suit which involves alleged malpractice of a doctor or alleged negligence of a hospital, little help is obtained or expected from the adverse party or his witnesses. Usually an attorney only prepares his own case and attempts to neutralize some of the opposition's thunder. In light of this legal axiom, it is surprising when two cases—within six days of each other—are won, not upon the particular theory of the winner, but upon some elements supplied by the opposition. In one instance this legal advantage favored a hospital, and in the other, a physician's own statements were his downfall. Object lessons are available in each case.

I.

In *Greenwood v. Paris,* 362 Pac. 2d 85 (Oklahoma, May 31, 1961) statements by a gynecologist to a patient and her husband after an operation were sufficient to provide expert evidence of negligence in diagnosis to submit to a jury. A dismissal of the plaintiff's damage suit for lack of evidence was reversed on appeal by the Oklahoma Supreme Court.

Consulted by the patient, the gynecologist made tests and determined that she was not pregnant but had a tumor which he suggested be removed immediately. Upon operating, however, he found that she was, in fact, pregnant.

The patient testified that after the operation the gynecologist said to her, "I am sorry, I should have made more tests on you."

Her husband testified that the gynecologist said, ". . . this is a terrible thing I've done, I wasn't satisfied with the lab report, she did have signs of being pregnant. I should have had the tests run again, I should have made some other tests. I'm sorry."

Although there was no expert testimony that the gynecologist was negligent in making his diagnosis, the appellate court held that the testimony as to his admissions was sufficient to go to the jury. Two justices dissented stating that, although the gynecologist recognized that he had made a mistake after the operation, his statements did not amount to admissions of negligence.

CAVEAT: A doctor's own words may prove his negligence.

II.

Six days before the Greenwood case was decided in Oklahoma, the Alabama Appellant Court in *Cooper v. Providence Hospital,* 130 So. 2nd 8 (Alabama, May 25, 1961), upheld a directed verdict in favor of the hospital.

A patient died apparently as a result of severe injuries from a fall in the hospital when he was permitted to get up unattended from his bed at night. In a damage suit for wrongful death, a directed verdict in favor of the hospital was granted by the trial court.

Three expert witnesses who testified in behalf of the patient said, in effect, that the hospital had exercised that degree of care, skill, and diligence used by hospitals generally in the locality. There was no contradictory evidence. The hospital did not introduce any evidence.

The appellate court's opinion was that the undisputed expert testimony was binding since there was no question of negligence to take to the jury. The ordinary rule that the weight and value of opinion evidence is to be determined by the jury did not apply under these circumstances.

CAVEAT: A patient's own witnesses may disprove a claim of negligence for the hospital.

Infrequently, a hospital or a physician will be as fortunate as the hospital in the Cooper case. Many times, however, a doctor's own statements have been the basis for a malpractice suit against him. It is not enough for fellow doctors to unthinkingly comment on another doctor's diagnosis or treatment, but often it is the doctor's own unguarded comments that provide the impetus for a suit.

—PHILIP R. OVERTON, LL.B., Austin.

Texas General Practitioners Complete Assembly Plans

The Texas Academy of General Practice 1961 Assembly activities in Houston will include a pre-assembly seminar Saturday, Oct. 14. The following day will be devoted to business sessions, and the scientific lecture program will be held Oct. 16-18.

The seminar will be on the subjects of allergy (morning session) and dermatology (afternoon session), and will be offered by the University of Texas Postgraduate School of Medicine. Dr. John P. McGovern, clinical associate professor of pediatric allergy, the University of Texas Postgraduate School of Medicine, Houston, will be in charge of the session on allergy; and Dr. J. Leslie Smith, Houston, of the session on dermatology.

The program will include "Basic Fundamentals in the Control of Allergic Reactions," Willson J. Fahlberg, Ph.D., Houston; "Use and Limitations of Steroids in the Management of Allergies," Dr. Samuel C. Bukantz, Denver; "Management of the Emotional Aspects of Allergic Disease," Dr. James A. Knight, Houston; and a panel which will discuss questions from the floor. Panelists will be Dr. McGovern; Dr. Theodore J. Haywood, Houston; Dr. Knight; Dr. Bukantz; and Dr. Fahlberg.

During the session on dermatology, the following topics will be discussed: "Cutaneous Manifestations of Systemic Disease," Dr. James H. Graham, Philadelphia; "Diagnosis and Treatment of Superficial Fungus Diseases of Skin," Dr. John M. Knox, Houston; "Precancerous Dermatoses and Internal Cancer," Dr. Graham; and "Neoplasms and Pseudoneoplasms of Skin, Clinical and Histologic Differentiation," Dr. Smith.

The seminar is being held in memory of the late Dr. Holland T. Jackson, who had been president both of the Texas and American Academies of General Practice. It is acceptable for seven hours of credit in Category 1.

Speakers for the scientific lecture program, which will begin Oct. 16, will be Dr. Anthony R. Curreri, Madison, Wis.; Mr. Mark M. Meyers, Dallas; Dr. Arthur Grollman, Dallas; Dr. William J. Block, San Antonio; Dr. L. Maxwell Lockie, Buffalo, N. Y.; Dr. Alton Ochsner, New Orleans; Dr. Philip Thorek, Chicago; Dr. N. Paul Isbell, Denver; and Dr. Milton Erickson, Phoenix.

Topics to be included are recent advances in cancer chemotherapy, financial planning, specific therapy, chest pain, treatment of rheumatoid arthritis and gout, new drugs, epidemiology of lung cancer, hypertension, collagen diseases, practical applications of surgical anatomy, pitfalls and safeguards in obstetrics, hypnosis in medical practice, and common gynecological problems. In addition, there will be a panel discussion on emotional problems of the teenager.

At the annual dinner-dance, Dr. Jack M. Partain, San Antonio, will turn the gavel over to Dr. Carlos E. Fuste, Jr., Alvin, who will serve as the Academy's president during the coming year.

Clinical Conference on Cancer

The sixth annual clinical Conference on Cancer, to be held in Houston Oct. 20 and 21, will feature presentations on chemotherapy, radiotherapy, and surgery in the management of cancers of the bladder, prostate, urethra, and penis, and other genitourinary problems.

Guest speakers will include Dr. D. M. Wallace, Royal Marsden Hospital, London, England; Dr. F. K. Mostofi, Armed Forces Institute of Pathology, Washington, D. C.; Dr. Willet F. Whitmore, Jr., Memorial Center for Cancer and Allied Disease, New York; Dr. Webb DeTar, Victoria; Dr. Gerald D. Dodd, Jr., Jefferson Medical College, Philadelphia; and Dr. Elizabeth A. McGrew, University of Illinois College of Medicine, Chicago.

The program will be held at the M. D. Anderson Hospital and Tumor Institute. Co-chairmen are Dr. Lowell S. Miller, Department of Radiology, and Dr. Cecil M. Crigler, Department of Surgery.

Teenage Obesity Discussed

An exploration into the problem of obesity among teenagers will be the subject of a symposium sponsored by the American Medical Association's Council on Foods and Nutrition. The conference will be held Oct. 21 in Stanford, Calif.

The morning session will deal with fat metabolism and various aspects of weight control. Psychological aspects of overeating and obesity, evaluation of calorie needs, and a panel discussion of the obese adolescent will conclude the program.

Registration may be made through the Council, American Medical Association, 535 North Dearborn, Chicago 10.

Medical-Legal Meet To Review Personal Injury Litigation

Doctors and lawyers from six states will serve as lecturers at an institute on personal injury litigation to be presented by the Southwestern Legal Foundation in Dallas, Nov. 16-18.

Topics slated for review and lecturers are: Proof of Causation in Products Liability Cases, Louis R. Frumer, vice president editorial, Matthew Bender & Co., Inc., New York City; and Preparation for Trial and Presentation of Evidence of Products Case, Bernard Chazen, attorney, Hoboken, N. J.

Also, Practical Aspects of Defending Products Liability Cases, George E. Bushnell, Jr., Detroit attorney; Disfiguring Injury, Dr. Mark L. Lemmon, Dallas; and Cross Examination of the Medical Witness, Newton Gresham, Houston attorney.

An explanation of various terms used in recording an examination of the musculoskeletal system will be offered by Dr. C. F. Gregory, professor of orthopedic surgery at the University of Texas Southwestern Medical School.

Dr. Kemp Clark, chairman of the school's division of neurosurgery, will explain the various neurologic terms employed in medical reports.

Emile Z. Berman, New York City attorney, will discuss applied psychology in trials, and report of the jury will be outlined by Dallas attorney Jack Berry and Earl Coleman, attorney from Denton.

Techniques in argument to the jury, taken from an actual argument to a jury on a specific situation, will be presented by U. S. District Judge Ben C. Connally, Southern District of Texas. Francis H. Hare, Birmingham lawyer, will serve as attorney for the plaintiff, and San Antonio attorney Josh H. Groce will be attorney for the defendant.

The conflict between fortuitous adversaries will be discussed by U. S. Circuit Judge John R. Brown, Fifth Circuit, and Norman E. Risjord, vice-president and general counsel, Employers Reinsurance Corp., Kansas City.

A question and answer period will follow each session of the Institute.

Copies of the program may be obtained from the Southwestern Legal Foundation, 3315 Daniels, Dallas 5.

In recent years the nation's supply of health workers—physicians, dentists, nurses, and others—has grown more rapidly than the population as a whole. According to Health Information Foundation, "the 1960 Census may very well show that within the last decade the health field has risen from seventh to third place among major U. S. industries in terms of numbers of persons employed."

Rowe Smith Seminar Set Nov. 30-Dec. 3 at Karnack

Scheduled Nov. 30 to Dec. 3 is the eighth annual seminar of the Rowe Smith Foundation. The seminar will be held at the Fly-n-Fish Lodge at Karnack on the Caddo Lake in East Texas.

Conference subject will be "Disturbed Carbohydrate Metabolism". Topics to be covered are epidemiology of disturbed carbohydrate metabolism; biochemistry of disturbed carbohydrate metabolism at the cellular level; dietary influences on blood sugar level; methods of detection of disturbances of carbohydrate metabolism; clinical types of diabetes mellitus; anthropometry and carbohydrate metabolism; hypoglycemia; influence of emotional factors on glucose metabolism; and the treatment of diabetes mellitus.

D. Walter Cohen, D.D.S., director of periodontia at the University of Pennsylvania School of Dentistry, will be moderator; and Dr. W. A. Seldin, professor and chairman of the Department of Internal Medicine, University of Texas Southwestern Medical School; and Dr. E. Cheraskin, chairman of the Department of Oral Medicine, University of Alabama Dental School, will be essayists.

Further information may be obtained by writing the Rowe Smith Memorial Foundation, 501 State National Bank Building, Texarkana, Ark.

Methodist Hospital Lectureship

The second annual Methodist Hospital Lectureship in Medicine will be held in Lubbock October 7.

Guest speakers will be Drs. Robert Berliner, Bethesda, Md.; John P. Merrill, Boston; and J. Russell Elkinton, Philadelphia. The meeting will be open to all physicians, and there is no registration fee.

Dr. Merrill's topics will be: "Introduction to Problems of the Kidney in Health and Disease", "Intact Nephron Hypothesis and Chronic Renal Failure", "Etiology and Prophylaxis of Renal Failure", and "Treatment of Renal Failure."

Dr. Berliner will discuss "Newer Concepts in Renal Physiology; Counter-current Mechanism, Excretion of Potassium and Hydrogenions" and "Effects of Dehydration and Hypotension on Renal Function."

Dr. Elkinton will speak on "Renal Acidosis and Tubular Syndromes" and "Fluid and Electrolyte Abnormalities in Renal Failure."

In addition, three general panel discussions are scheduled.

Total Care of Cancer Patient Is Theme for ACS Meet

The Physician and the Total Care of the Cancer Patient will be the theme of the October 23-24 meeting of the American Cancer Society in New York.

Decisions in the early care of the patient as affected by the site and type of the cancer will be discussed. Dr. Murray M. Copeland, Houston, will be chairman of a session on counseling the cancer patient, and the opinions of a general practitioner, surgeon, radiologist, and internist will be heard.

The surgeon, psychiatrist, and pastor will explore what the cancer patient should be told about his diagnosis and prognosis.

Care of the advanced cancer patient is yet another topic; Dr. John S. Stehlin, Jr., of Houston will discuss the role of perfusion chemotherapy as a part of a symposium on this subject, which will include radical surgery, systemic chemotherapy, radiation, nutritional care, pain control, and aggressive and extraordinary means of treatment.

Finally, the role of society in caring for cancer patients will be the subject of the final afternoon session.

Southwest Regional Cancer Conference

The Southwest Regional Cancer Conference will meet Sept. 24 at the Fort Worth Academy of Medicine.

The program will be as follows:

Carcinoma of the Stomach—Dr. Claude E. Welch, associate clinical professor of surgery, Harvard Medical School.

Tumors of the Breast—Murray M. Copeland, assistant director for education, University of Texas M. D. Anderson Hospital.

Relationships Between Chemotherapy and Radiation Therapy—Dr. Milton Friedman, professor of clinical radiology, New York University School of Medicine.

At the luncheon, there will be a question and answer period, and for the afternoon program, each of the three speakers will discuss a selected clinicopathological conference.

Association Meets in Las Vegas

The Southwestern Medical Association will meet in Las Vegas, October 19-21.

Speakers will be: orthopedics, Dr. Benjamin Fowler, Nashville; ophthalmology, Dr. Max Fine, San Francisco; internal medicine, Dr. William Parson, Charlottesville; surgery, Dr. O. T. Claggett, Rochester, Minn.; obstetrics, Dr. Cary M. Dougherty, New Orleans; and dermatology, Dr. Arthur Curtis, Ann Arbor.

American Rhinologic Society Sets October Conference

The American Rhinologic Society will meet in Chicago Oct. 7. Most of the morning will be taken up with a conference, "The Work of Breathing". Panelists will be Drs. David Cugell, George W. Holmes, Albert H. Andrews, Jr., Roland M. Loring, and Paul Schimert, Chicago.

Dr. Robert L. Goodale, Harvard Medical School, Boston, will speak on "New England Pioneers in Rhinology" and his address will be followed by an afternoon conference on "Trauma, Infection, and Allergy". Participants will be Drs. Ethan A. Brown, Boston; Aubrey G. Rawlins, San Francisco; Benjamin W. Zweifach, New York; and Kenneth H. Hinderer, Pittsburgh.

Other reports will be made on research and education, upper half syndromes with nasal pathology, and processed lyophilized bone and cartilage.

Dr. Robert M. Hansen, Secretary, 2210 Lloyd Center, Portland 12, Ore., can provide further information.

Congenital Defects Due Inter-American Study

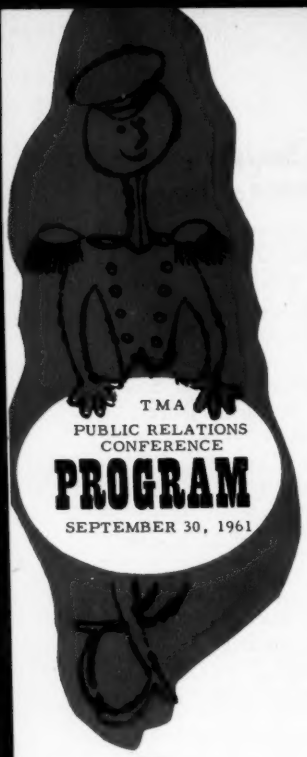
The first Inter-American Conference on Congenital Defects, which will include participants from the United States, Canada, and Mexico, has been scheduled for Jan. 22-24, 1962, in Los Angeles.

Sponsored by the National Foundation and the University of Southern California, the conference is being planned by Dr. Norman H. Topping, president of the University of Southern California, chairman of the program committee, and by Dr. Frank L. Horsfall, Jr., president and director of the Sloan-Kettering Institute for Cancer Research, and Dr. Robert Ward, professor and chairman of the Department of Pediatrics, University of Southern California School of Medicine, co-chairmen. Topics for the program will include various aspects of genetic defects, structural defects, and clinical manifestations of genetic and structural defects.

AAMA To Meet in Reno

Some 1,000 medical assistants—members of the American Association of Medical Assistants—are expected to gather in Reno, Nev., Oct. 13-15 for their fifth annual convention. They will hear talks by physicians, professional management experts, and educators and officials from governmental, pharmaceutical and military fields.

Additional information may be obtained from AAMA headquarters, 510 North Dearborn Street, Chicago 10.



PUBLIC RELATIONS PROGRAM

Texas Medical Association Headquarters Building, Austin.
Saturday, September 30, 1961

MORNING PROGRAM, 9 A.M.

Call to Order.—Dr. James D. Murphy, Fort Worth, Speaker, House of Delegates, Texas Medical Association.

It Could Happen Here.—Harvey Renger, M.D., Hallettsville, President, Texas Medical Association.

The Inside Story of an Outside Chance.—Charles E. Irvin, Ed.D., Ormond Beach, Fla., General Motors Corporation.

The Physician's Responsibility in Government.—Dr. Durward G. Hall, Springfield, Mo., Representative in Congress, Fifth Congressional District of Missouri.

Town Crier.—Mr. Leo E. Brown, Chicago, Assistant to Executive Vice-President, American Medical Association.

Priority Public Relations Projects for the Year Ahead (Panel Session).—Dr. Foy H. Moody, Corpus Christi, Moderator. Member, Council on Public Relations and Public Service.

Doctor-Patient Relations.—Dr. R. Mayo Tenery, Waxahachie, Vice-President, Texas Medical Association.

Explaining the Costs of Medical Care.—Dr. Everett C. Fox, Dallas, Member, Commission on Medical Care Costs, American Medical Association.

Promoting Medical Careers.—Dr. A. Fletcher Clark, Jr., San Antonio, Member, Committee on Medical Careers.

Ammunition.—Mr. Leo E. Brown, Chicago, Assistant to Executive Vice-President, American Medical Association.

LUNCHEON, 12:30 P.M.

AFTERNOON PROGRAM, 1:35 P.M.

You and Congress.—Robert W. French, Ph.D., New York, President, Tax Foundation, Inc.

County Society Public Relations Panorama (Panel Session).—Dr. Joe R. Donaldson, Pampa, Moderator, Chairman, Council on Public Relations and Public Service.

Utilizing Television Effectively in Your County Society.—Roy J. Cates, Austin, Executive Secretary, Travis County Medical Society.

Winning Friends and Influencing People Through the Physician's Speakers' Bureau.—Dr. A. Rex Kirkley, Belton, Public Relations Chairman, Bell County Medical Society.

Acquainting Newcomers with Your Medical Facilities.—Dr. Richard O. Albert, Alice, Secretary, Brooks-Duval-Jim Wells Counties Medical Society.

As Others See Us—Medicine and the Press.—Dr. Wm. H. Gordon, Lubbock, Councilor, District 3.

Medicine and the Desegregation Issue.—Dr. Floyd A. Norman, Chairman, Public Relations Committee, Dallas County Medical Society.

Presentation of the First Harriet Cunningham Memorial Fellowship in Medical Writing.—Dr. May Owen, Fort Worth, Immediate Past President, Texas Medical Association.

Final Address.—Mr. H. Lewis Rietz, Houston, President, Health Insurance Association of America.

EVENING PROGRAM, 5:30 P.M.

Hospitality Hour and Buffet.—Ballroom, Driskill Hotel, Courtesy of the Charles O. Finley Company, followed by Texas vs. Texas Tech. football game, Memorial Stadium, 7:30 p.m. Football game tickets are available at $4 each from office of Mr. C. Lincoln Williston, 1801 North Lamar Blvd., Austin.

ORIENTATION PROGRAM

Texas Medical Association Headquarters Building, Austin.

Saturday, September 30, 1961

MORNING PROGRAM, 9 A.M.

Call to Order.—Dr. James D. Murphy, Fort Worth, Speaker, House of Delegates, Texas Medical Association.

It Could Happen Here.—Dr. Harvey Renger, Hallettsville, President, Texas Medical Association.

The Inside Story of an Outside Chance.—Charles E. Irvin, Ed.D., Ormond Beach, Fla., General Motors Corporation.

The Physician's Responsibility in Government.—Dr. Durward G. Hall, Springfield, Mo., Representative in Congress, Fifth Congressional District of Missouri.

Town Crier.—Mr. Leo E. Brown, Chicago, Assistant to Executive Vice-President, American Medical Association.

Welcome and Special Message for New Members.—Dr. Walter H. Walthall, San Antonio, Vice-Chairman, Board of Councilors, Texas Medical Association.

The Texas Medical Association; An Accounting of Stewardship; What Happens to Your $45 Dues?.—Dr. R. W. Kimbro, Cleburne, Chairman, Board of Trustees, Texas Medical Association.

Public Relations and Socio-economic Considerations in the Practice of Medicine.—Mr. C. Lincoln Williston, Austin, Executive Secretary, Texas Medical Association.

LUNCHEON, 11:55 A.M.

AFTERNOON PROGRAM, 1 P.M.

Medical Ethics Considerations in the Practice of Medicine.—Dr. C. E. Oswalt, Jr., Fort Stockton, Chairman, Board of Councilors, Texas Medical Association.

Medical Etiquette; Obligations of the Physician to Colleagues and to the Profession.—Dr. R. Mayo Tenery, Waxahachie, Vice-President, Texas Medical Association.

You and Congress.—Robert W. French, Ph.D., New York, President, Tax Foundation, Inc.

Serving the Doctors of Texas.—Mr.Donald M. Anderson, Austin, Assistant Executive Secretary, Texas Medical Association.

The Veterans Administration Hospital Program and Its Impact Upon the Private Practice of Medicine.—Dr. Milton V. Davis, Dallas, Chairman, Committee on Military and Veterans Affairs.

Legal Aspects of Medical Practice; Malpractice—How to Avoid It.—Philip R. Overton, LL.B., Austin, General Counsel, Texas Medical Association.

Presentation of the First Harriet Cunningham Memorial Fellowship in Medical Writing.—Dr. May Owen, Fort Worth, Immediate Past President, Texas Medical Association.

Final Address.—Mr. H. Lewis Rietz, Houston, President, Health Insurance Association of America.

EVENING PROGRAM, 5:30 P.M.

Hospitality Hour and Buffet.—Ballroom, Driskill Hotel, Courtesy of the Charles O. Finley Company, followed by Texas vs. Texas Tech. football game, Memorial Stadium, 7:30 p.m. Football game tickets are available at $4 each from office of Mr. C. Lincoln Williston, 1801 North Lamar Blvd., Austin.

Mr. Brown

Dr. French

Dr. Hall

Dr. Irvin

Mr. Rietz

South Texas Medical School To Be Built in 1963

Construction of the new University of Texas Medical School at San Antonio may be started on Jan. 1, 1963, with prospects that the first class of students will be enrolled in the Fall of 1964 or 1965.

The 100 acre plot of land in Oak Hills which was deeded in August to the University of Texas by the San Antonio Medical Foundation, is the largest medical school site in Texas. It is located in a much larger tract which eventually will encompass approximately 500 acres devoted entirely to institutions of the South Texas Medical Center. One of these, the Southwest Texas Methodist Hospital, is already under construction.

Last January 31, San Antonio citizens, by a 7 to 1 vote, passed a bond issue of $5,000,000 to finance the construction of a teaching hospital that will be built adjacent to the medical school. This amount must be matched by Hill-Burton or other funds. The total received should allow erection of a 400 to 500 bed hospital with outpatient facilities. The teaching hospital will be designed, erected, and operated by the Bexar County Hospital District in close cooperation with the University of Texas.

In the special session just past, the Texas Legislature appropriated $100,000 for the fiscal year 1961-1962 to employ a dean and other personnel as needed and to finance preliminary planning of the medical school, both as to physical plant and program. Another appropriation of $1,750,000 for the fiscal year 1962-1963 has been made to cover part of the costs of the first building unit of the medical school. In addition, Texas lawmakers will have to appropriate funds in 1963 to allow the school to be activated.

Although there is a possibility that students of the school's first class could be admitted in September, 1964, it is more likely that they will enter a year later. Improvisations such as temporary structures might allow earlier activation of the school, but the need for such measures is not anticipated by University officials.

Present plans are to provide facilities to accommodate 100 students in the medical school's classes. Nevertheless, the first class to enter may number only 60. This is slightly less than the size of classes at Baylor University College of Medicine in Houston, and is exceeded by those at Southwestern Medical School at Dallas (100 students) and the University of Texas Medical Branch at Galveston (135 to 160 students).

A master plan committee, appointed to coordinate development of the Medical Center, has among its members Dr. Walter Walthall, vice chairman of the Board of Councilors of Texas Medical Association. He represents the board of managers of the Bexar County Hospital District.

South Texas Medical Center Dedicated in San Antonio

The South Texas Medical Center, now under construction, was dedicated in San Antonio August 19.

A crowd of 300 was on hand to hear speeches by Dr. Joseph C. Hinsey, head of the New York Hospital-Cornell Medical Center in New York City, and Lt. Gen. Leonard Heaton, Surgeon General of the Army.

"One cannot fail to be impressed with the opportunity which exists here," said Dr. Hinsey. Lt. Gen. Heaton pledged full cooperation of the United States Army medical service, and predicted that the center will "play a major role in the betterment of mankind, not only in San Antonio but also throughout the nation and no doubt the world."

Dr. James P. Hollers, chairman of the San Antonio Medical Foundation, which has been a leader in the development of the new center, presided, and Dr. John M. Smith, Jr., a trustee of the Foundation, read the dedicatory proclamation.

Dr. Harvey Renger, President of the Texas Medical Association, participated in the ceremonies, along with Dr. Merton M. Minter, former chairman of the University of Texas Board of Regents; Dr. L. Bonham Jones, president of the Bexar County Medical Society, and Dr. John L. Matthews, a trustee of the Foundation.

The ceremonies were held in the Southwest Texas Methodist Hospital, now under construction; it will be near the new medical school.

Endocrinology Topic Of Postgraduate Assembly

Scheduled for October 2-6 in Bethesda, Md., is the 13th Postgraduate Assembly in Endocrinology and Metabolism.

Under the cosponsorship of the Endocrine Society and the National Institutes of Health, the meeting will feature a comprehensive review of clinical endocrine problems and current research activity.

Further information may be obtained by writing Dr. Roy Hertz, National Institutes of Health, Building 10, Bethesda 14, Md. The fee for physicians is $100 and for residents and fellows, $30. Enrollment is limited to 100 persons.

Postgraduate Courses

Emotional Stress and Morbidity in the Gravida, Houston, Sept. 22-24.—Since disabling symptoms of emotional etiology have been traced to the period of arrival of the new member in the family, the University of Texas Postgraduate School of Medicine is offering this course on "Emotional Stress and Morbidity in the Gravida as Related to Physician and Family". The course is based on the principle that the family physician is in a key position to recognize incipient emotional problems before they assume formidable proportions. The format will be that of an informal panel and workshop. Scheduled for Sept. 22-24, the course will be held in the Jesse Jones Library Building, Texas Medical Center. Instructor in charge is Dr. David Mendell, clinical associate professor of psychiatry, Baylor University College of Medicine and the University of Texas Postgraduate School of Medicine and Faculty consultants.

Advances in Pediatric Diagnosis and Practice, Atlanta, Oct. 31-Nov. 2.—A general review of recent advances in pediatrics is planned. Attention will be focused on growth and development, genetics, behavior problems, fluid and electrolytes, metabolic disorders, and allergies. Dr. Ralph V. Platou, professor of pediatrics and head of the Department of Pediatrics, Tulane University School of Medicine, New Orleans, will conduct the course.

Fractures in General Practice, Atlanta, Nov. 14-16. Emphasis will be on the more common fractures seen in general practice. Drs. Louis A. Goldstein, associate professor of surgery (orthopedics), University of Rochester School of Medicine, Rochester, N. Y., and Darius Flinchum, instructor in surgery (orthopedics), Emory University School of Medicine, Atlanta, will compose the guest faculty.

Obstetric Problems in Private Practice, Atlanta, Jan. 23-25.—Emphasis will be on the prevention management of the minor, as well as the major, complications of pregnancy. Dr. Michael Newton, professor and chairman, Department of Obstetrics and Gynecology, University of Mississippi Medical Center, Jackson, will conduct the course.

Cardiac Emergencies, Atlanta, Feb. 13-15.—Dr. Harold D. Levine, Peter Bent Brigham Hospital, Boston, will direct this course, which will be directed toward the immediate management of calamitous events of circulatory origin.

There is some suggestion that the basic scientist is becoming less basic or the adept clinical scientist is becoming more basic; in any case, the difference between them narrows. The result may be the dilution of basic knowledge, which otherwise is destined to be tomorrow's clinical science.—*J.A.M.A.,* June 3, 1961.

New York University Offers Postgraduate Training

Courses of particular interest to practicing physicians and surgeons are being offered by the Post-Graduate Medical School of the New York University Medical Center this fall.

New this year will be a "Symposium on Vascular Surgery", to be given Nov. 9-11, under the direction of Dr. Jere W. Lord, Jr., and Dr. Roy H. Clauss. A guest faculty of outstanding authorities will participate, and the program has been planned to attract the surgeon as well as the general practitioner and internist.

Dr. J. Scott Butterworth will give two courses, "Diagnostic Cardiac Auscultation" and "Electrocardiography," the first Oct. 11-14, and the second Nov. 6-11.

Dr. Ramon Castroviejo will offer "Surgery of the Cornea," with practical instruction, on a full-time basis, Nov. 13-17. Surgical procedures in the operating room will be observed as material is available.

"Theory and Practice of Contact Lenses" will be given by Dr. Donald A. Fonda Nov. 9-10. Half the time will be devoted to the practical application of corneal lenses.

From Oct. 2-6, 1961, Dr. Gray H. Twombly will teach "Diagnosis and Therapy of Malignant Neoplasms of the Female Genital Tract". Practical work and radium dosage calculation will be emphasized.

Directed by Dr. Maxwell H. Poppel with an outstanding guest faculty will be a once-weekly course in "Diagnostic Radiology," given on Wednesdays from 4:30 to 6 p.m., for twenty sessions starting Oct. 18.

All of these courses will use the facilities of the New York University Medical Center and other clinical locations as necessary. For information and applications, physicians may write the Office of the Associate Dean, New York University Post-Graduate Medical School, 550 First Avenue, New York 16.

Home Care Pioneer Wins Award

Dr. E. M. Bluestone, 69, who pioneered the home care program at Montefiore Hospital, New York, has been chosen to receive the American Hospital Association's Distinguished Service Award for 1961. Highest honor conferred by the hospital group, presentation will be made during the Association's sixty-third annual meeting September 25-28 in Atlantic City, N. J. Called "the father of home care," Dr. Bluestone has been a leader in the development of better care for persons with prolonged or chronic illness.

Texas Groups Oppose HR 4222 Before Congressional Committee

Excerpts of Statements

IN WASHINGTON LAST MONTH representatives of several Texas medical and para-medical groups officially filed their convictions on the King-Anderson bill with the House Ways and Means Committee.

Texas Medical Association, represented by President Harvey Renger of Hallettsville and Dr. Milton V. Davis of Dallas, assumed a positive approach:

"We believe that medical care should be available to all citizens of Texas, regardless of age or ability to pay. We believe in helping those who need assistance in financing their medical care costs. But we do not believe that the tax dollars of employers and the working people of our state should be used to finance medical care for those individuals who are able to pay for it themselves. We strongly favor individual, local, and state responsibility in health care for all people. We vigorously oppose H.R. 4222 because it undermines this philosophy, and forfeits responsibility to the federal government."

The Association further amplified its premise with facts which had been thoroughly researched by various authoritative surveys. It said, for instance, that of 745,000 persons in Texas aged 65 or older, an estimated 175,000 are gainfully employed; 73,000 receive income from private retirement or pension plans; many others are spouses of wives or husbands who are working; and about one-third, or 245,000, receive income from dividends, interest, rent, and other sources. Income also comes from children and relatives and government funds already available.

Cited, too, were benefits of Blue Cross-Blue Shield, other voluntary health insurance plans, and the Kerr-Mills Act.

Mr. Eldred Thomas of Dallas, past president of the Texas Nursing Home Association, who also submitted a statement, noted that Texas' 611 nursing homes contain 18,000 beds, of which 15,000 are occupied. This amounts, he said, to approximately 2 per cent of the state population over age 65, nearly the same as the national average.

"All nursing home residents are in need of care. The average stay is two and one-half years. The average age is 80; two-thirds are 75 and over, one-fourth are 85 and over. They are there because of chronic disabilities, including strokes, heart conditions, arthritis, fractures, incontinence, and senility. They need assistance in eating, dressing, bathing, shaving, care of hair, and walking. They sometimes need full bed care, including enemas, bed pans, dressings, medications, special diets, and periodic checking of temperature, pulse, respiration, and blood pressure. Some need more extensive skilled nursing care. They need modern techniques of restorative rehabilitation services in order to reach maximum activity and happiness."

Mr. Thomas further reported: "In Texas 6,332 of the 15,000 residents in nursing homes are able to pay for their care through OASI, pensions, assistance of relatives, assistance by county and local government, and by assistance provided by self help. The 6,332 did not need state public assistance with which to meet their nursing home expenses. Eight thousand, six hundred sixty-eight (8,668) are recipients of public assistance, and, through a combination of the above, meet their nursing home expenses. The average monthly income of public assistance recipients in nursing homes, from all sources, is $116.72. The average cost for nursing home care in Texas is $150. The deficiencies will be met by presently enacted legislation taking advantage of the Kerr-Mills legislation which recently passed Congress. There is no need for additional assistance to take care of nursing home expenses in Texas."

If passed, Mr. Thomas added, the King-Anderson bill would be inadequate. It provides for only 180 days of nursing home care whereas the average nursing home stay is two and one-half years.

At the end of 1960, he said, there were 15,000 residents in 611 nursing homes in Texas; there were 18,000 beds and 3,000 vacancies.

Noting that 50 per cent of the residents meet their nursing home needs without state public assistance, Mr. Thomas declared, "This means that 50 per cent of nursing home residents are in need of no further monetary assistance or they would be taking advantage of public assistance. The other 50 per cent who are in need have their needs met through combinations of public assistance, social security, pensions, and retirement funds and county or local assistance. The recently enacted Kerr-Mills legislation will adequately provide for the nursing home care needs of this 50 per cent."

State Senator Crawford C. Martin of Hillsboro

appeared before the House Ways and Means Committee with this message:

"With implementation of the Kerr-Mills program, there is no reason to add medical aid to the benefits of those who are receiving social security checks."

"In reviewing the findings of the Governor's Committee on Aging [of which Sen. Martin was chairman], and after evaluating testimony presented during the state hearings of my vendor medical care bill, it became obvious to me that health care was not the problem among the aged that I had been led to believe. It is an important factor, yes, but no more so than housing, employment, recreation, and the over-all attitude people have concerning our older citizens. Most older people do not like to be classified as having one foot in the grave, merely because they have reached an artificial barrier which has been established at the age of 65."

The Senator added, "The fear of poor health is of great concern to the aged in our state. Nevertheless, it is not accurate to say that health and medical care is the number one problem of those 65 and older. What the aged need more than any one thing is an active and productive role in society. The Texas Employment Commission has a special division which is helping to secure jobs for people over 65 who are willing and able to work. It also is working with business and industry in creating a more favorable attitude toward hiring older workers. The majority of the aged in Texas desire most of all the opportunity to take care of themselves."

"If given the chance through the Kerr-Mills program," he concluded, "Texas physicians, hospitals, and nursing homes can meet the health care needs of our aged who need and are entitled to the protection of a tax-financed program. If given the chance, private industry and personal initiative will advance further to meet the needs of the aged of tomorrow."

Presenting the statement of the Texas Dental Association was its president, Emmett R. Johnson, D.D.S., of Dallas.

He asserted, "The Texas Dental Association is opposed in principle to the provisions of health care benefits by the federal government to any segment of the general population without regard to need."

"We believe that every citizen should provide for his own future health needs through the means now available in private channels such as health insurance, personal savings, etc. When, through adversity, the individual cannot care for himself, the responsibility should be passed to his family, the community of which he is a part and only to the state when no other means exists for his care. Traditionally, the physician and the dentist have provided health services for our unfortunate citizens who, through no fault of their own, cannot purchase these services. It seems unlikely that the physician or dentist would call upon the federal government to take over a service that has been so fully given without legislation."

F. R. Higginbotham of Dallas, the presiding officer of the Texas Hospital Association House of Delegates, told legislators: "We are convinced that this legislation is not required. Studies in Texas by various organizations and individuals indicate that Texas residents 65 years of age and older are not the poor, sick people described by those people advocating HR 4222 and similar legislation. For example, the average length of stay in short-term, general hospitals for all types of cases, nationally, is 7.6 days. The average length of stay for all patients in Texas in short-term, general hospitals during 1960 was 6.1 days. The experience of one large voluntary prepayment organization covering 78,000 persons aged 65 and over in Texas indicates a median length of stay of only 7.66 days—only 1.56 days in excess of all Texas patients and .06 (6/100) of one day in excess of the national average for all patients."

Noting that much has been said against the "means test" by proponents of HR 4222, Mr. Higginbotham asked, "May I point out that HR 4222 contains a 'means test' by providing a deductible feature for hospitals and outpatient benefits. This feature works to the advantage of the wealthy aged and to the disadvantage of the indigent aged."

Summarizing his statement, the hospital official said, "We view HR 4222 as a proposal for providing socialized medicine for one segment of our population—the so-called aged. We are presently and can continue to care for our own, and firmly believe that this unwarranted centralization of regulation and control in an agency of the federal government will lead not only to a deterioration of the excellent care now being provided but will tend to spread to other segments of the population."

Do Nikita's Bad Teeth Cause World Crises?

Do Nikita Khrushchev's teeth cause his distemperance?

A Danish dentist, Dr. Finn G. Larsson, seems to think so. Dr. Larsson offered the Soviet premier a free denture in a recent letter.

"I have noticed," he said, "that his molars are too small, which causes too low a bit."

This can cause other inconveniences but, in addition, "it can reduce hearing and cause chronic headache. I will therefore give him a new prosthesis."

Although he doubted that Khrushchev would go to Denmark for the fitting, Dr. Larsson thought that perhaps the premier would go to a dentist in Moscow.

"Maybe something can be done to alleviate the unnecessary pressure on the nerves," he added.

Shown left to right with Governor Price Daniel, seated center, as he signs into law the vendor's medical care bill are Rep. Jim Markgraf of Scurry, Rep. Sam F. Collins of Newton; Rep. Bill Hollowell of Grand Saline; Al Scheidt, Dallas, president of the Texas Hospital Association; Dr. Charles P. Hardwicke of Austin; Rep. James Turman of Gober, speaker of the House of Representatives; Rep. Ronald E. Roberts of Hillsboro; Senator Crawford C. Martin of Hillsboro, sponsor of the bill; Mr. Ray Hurst, Executive Secretary of the Texas Hospital Association; and Mr. C. Lincoln Williston, Executive Secretary of TMA.

Vendor's Medical Care Law To Become Effective January 1

Less than four months from now, eligible Texans will receive benefits from the first phase of the Kerr-Mills Act to be made law in the state. Funds were appropriated by legislators at the close of the first summer special session for the vendor's medical care program, which was passed earlier this year by the 57th Legislature. A total of $13,320,000 was appropriated from state general revenue funds for the program covering a period from January 1, 1962, through August 30, 1963. For the first fiscal year through August 30, 1962, a total of $5,328,000 was made available, and for the second year, $7,992,000 was voted.

Under the program, the State Department of Public Welfare, the administrative body, will receive $12 monthly multiplied by the number of recipients on the Old Age Assistance rolls for the preceding month. State funds will be supplemented by federal money through the Kerr-Mills Act at an approximate ratio of three federal dollars to one state dollar. Percentagewise, this means 75.79 per cent federal money is matched to 24.21 per cent state money.

Payments will be provided for inpatient care in the hospital, including medical and surgical services performed by physicians, and for nursing home benefits. Approximately 221,000 recipients of Old Age Assistance will be eligible for such medical care services.

No decision has been made on how the program will be administered by the State Department of Public Welfare, but the department has a choice of making direct payments to vendors of medical service; of contracting for a plan of voluntary, prepayment health insurance, either by Blue Cross-Blue Shield of Texas or a commercial insurance underwriter; or of combining these two alternatives.

Mr. John H. Winters, commissioner of the State Department of Public Welfare, will announce the administrative plans later this year.

376 Pass LVN Examinations

Vocational Nurse Licenses have been issued to the 376 candidates who passed the most recent examination given by the Board of Vocational Nurse Examiners. Five candidates qualified through two years' training in professional nursing schools, and 33 applicants from other states were granted reciprocity licenses.

A total of 109 vocational nurse training programs are active throughout the state; two new ones approved at the July meeting of the Board are the Lee College School of Vocational Nursing, Baytown, and Panola County School of Vocational Nursing, Carthage.

AMA Staff Promotions

Dr. F. J. L. Blasingame, AMA executive vice president, Chicago, has announced that Mr. Leo E. Brown has assumed duties as assistant to the executive vice president, and that Mr. Jim Reed has taken over as director of the Communications Division of the AMA. Mr. Brown formerly was director of communications, and Mr. Reed formerly was director of press relations and editor of *The AMA News*.

Basic Sciences Examination

The next basic sciences examination has been set for October 16-17 in Austin. Applications must be postmarked no later than September 29. Interested persons may write the Texas State Board of Examiners in Basic Sciences, 1012 State Office Building, 201 East 14th, Austin 1.

Medical Examiners' Board Announces June Honor Roll

Dr. Philip Sidney Bentlif of Houston, a 1956 graduate of the University of Cambridge Faculty of Medicine, England, has earned the highest grade average in medical examinations offered in June by the Texas State Board of Medical Examiners. His average was 92.6.

The Board recently announced the results of the June examinations in which 24 other candidates for licensure in the state also have received honors.

Honor graduates include Dr. David Roger Stoop of Queens Village, New York, and now at the United States Naval Hospital at San Diego, Calif., Dr. Charles Lloyd Heaton of College Station, Dr. David Lee Matheson of Seattle and now in Galveston; Dr. Charles Lucius Renshaw of Fort Worth; Dr. Wilbur Guy Fiscus of Stillwater, Okla., Dr. Scott Montgomery Grundy of Memphis and now in Houston, Dr. Charles Alfred Van Wart of Houston, Dr. Robert Carter Austin of Houston and now in Glendale, Calif., Dr. Carroll Francis Hamill of Corpus Christi, Dr. James David Blackburn of Jefferson, and Dr. Jean-Rene Dupont of Houston and now in San Augustine.

Also, Dr. Howard Smith Praver of Houston, Dr. Frederick Irving Schaffner of Houston, Dr. Lawrence Owen Baum, Jr., of San Marino, Calif., and now in Alhambra, Calif., Dr. Ann Rhaye Cook of Houston, Dr. Richard Clarence Geis of Rosenberg, Dr. Lawrence Gail Hardwicke of Galveston, Dr. Kenan Kay Kennamer of Dallas, Dr. Richard Hugh Watt, Jr., of Los Angeles, Dr. William Frederick Fathauer, Jr., of Brecksville, Ohio, Dr. George Bledsoe Tipton of Groesbeck, Dr. Kenneth Chamber of Galveston and now in Bay City; Dr. H. Newland Oldham, Jr., of Amarillo, and Dr. David Earl Browning, Jr., of Dallas and now in Houston.

Texas' First Woman M.D. Leaves Bequest to Crippled Children

The late Dr. Marie Dietzel was the first woman to receive a medical education in Texas. Now, three years after her death, a $500 bequest from her estate has been received by the Crippled Children's unit of the University of Texas Medical Branch.

Dr. John B. Truslow, executive dean and director, announced that the money is to be used "for braces or appliances to help the children get well".

Dr. Dietzel, who practiced in Galveston for 40 years after receiving her doctor of medicine degree in 1897, was registered at the School of Medicine under her maiden name, Marie P. Delalondre.

Hospital Disaster Plan Pays

The life-saving value of advance planning in coping with civil disaster is vividly illustrated by a news story and editorial appearing in the July issue of *Group Practice*, official organ of the American Association of Medical Clinics.

On a bitterly cold evening, a fire was discovered at the Lutheran Hospital, LaCrosse, Wis. In less than 15 minutes, doctors, nurses and hospital workers, operating on a pre-arranged and well rehearsed plan, evacuated 121 patients from the hospital, without injury or panic.

The experience revealed a few flaws in advance planning. The hospital switchboard was hampered in making outgoing calls because of the rush of incoming calls. In a future emergency, the telephone company may block incoming calls. Also the fire, occurring in the center of the hospital, isolated the outer wings from each other, so that two separate disaster programs had to operate simultaneously. Emergency intercom facilities will be available hereafter.

Group Practice comments editorially: "It seems not unlikely that as time goes on more and more clinics and clinic physicians will have to prepare themselves efficiently for possible disaster in their communities."

Papers on Goiter Now Being Accepted

The American Thyroid Association, Inc., has announced the opening of its 1962 Van Meter Prize competition for the best manuscript of original and unpublished work concerning "Goiter—Especially Its Basic Cause".

Studies may relate to any aspect of the thyroid gland in all of its functions in health and disease. Competing essays may cover either clinical or research investigations, and should not exceed 3,000 words in length. They must be presented in English.

The award is for $500 and will be presented at the Association's annual meeting May 9-12, 1962, at the Roosevelt Hotel, New Orleans. A place on the program will be reserved for the winning essayist if he can attend the meeting. When more than one author's name appears on the manuscript the authors will be asked to designate one individual to receive the award.

Duplicate typewritten copies, double spaced, should be sent to the secretary not later than Jan. 1, 1962. He is Theodore Winship, M.D., 430 N. Michigan Ave., Chicago 11.

The Stones in their natural habitat.

Cartoons for Fun and Profit

A flair for humor and art has made a pleasant hobby and a profitable business for a young Galveston physician, Dr. Orville J. Stone, and his wife, Margaret.

Proof of their combined talents are sales of more than 450 cartoons to 38 publications, most of them in the medical field, within the last two and a half years.

Says Mrs. Stone, "Orville always has some humorous or satirical remark to fit any situation; in fact, it keeps me hopping to get in the last (funny) word. ... He had quite a few ideas and I have had a background in fine arts, so we just decided to try cartooning. We enjoyed it tremendously, and had enough scattered sales at the beginning to encourage us further. Now it sometimes is difficult to keep up with our markets."

Dr. Stone's ideas and captions come first. He writes them on cards, which Mrs. Stone finds inside, under, behind, and on top of everything in the house. She draws the finished cartoon, then Dr. Stone takes over the marketing and bookkeeping.

Originality of humor is one of Dr. Stone's favorite topics; he recently wrote an article on the subject for the *Pro Cartoonist and Gagwriter.* The best way to assure originality, he thinks, is to have a different approach, and he thinks that as an M.D., his humor is of a type different from that of most cartoonists.

"We never do any knee reflex gags because it is impossible to do an original one. In the last two years, five medical magazines have published cartoons by a different cartoonist showing a woman standing on a scale on just one foot (someone obviously was doing a little stealing)," say the Stones. Their favorite gags are those concerning current satire on problems and changes within the medical profession.

Identical ideas, however, are common even among ethical cartoonists, and in an effort to avoid this pitfall, the Stones have for three years followed every medical publication that uses cartoons. In addition, they have a six year file of the *Gag Re-Cap,* a monthly publication which contains summaries of all general circulation cartoons.

An accomplished artist, Mrs. Stone has for two years won first place in the oil portraits division of the Galveston Art League Exhibit. In addition, she says, "I keep house, keep children, and cartoon in my spare time, or perhaps that is the wrong order—keep children, cartoon, and keep house in my spare time." Claiming the major chunk of her time are the four little Stones, Greg, 5; Doug, 3; Stephen, 2; and David, 6 months.

Dr. Stone is a third year dermatology resident at the University of Texas Medical Branch; he was graduated from the University of Illinois College of Medicine in 1956. In addition to the practice of dermatology, he also is interested in research and teaching.

Many of the cartoons that will appear in the near future in the *Journal* are the results of the Stone's joint efforts.

Woman's Auxiliary Plans Sept. 28-29 Meetings

The Woman's Auxiliary to the Texas Medical Association will hold its Executive Board meeting on Thursday, Sept. 28, and its School of Instruction on the following day at the Association's headquarters building in Austin. Theme for this year's Auxiliary program is "Information and Service".

Registration will begin at 1 p.m. on Sept. 28, and coffee will be served until the board meeting convenes at 2 p.m. Mrs. Garland G. Zedler, Austin, President, will preside. Highlights will include an address by Dr. Harvey Renger, Hallettsville, President of the Texas Medical Association; a report of the American Medical Association Auxiliary meeting in New York last June by Mrs. R. C. L. Robertson, Houston, President-Elect; displays by state committee chairmen; and announcements of business and plans for the year by Auxiliary officers and chairmen. In addition to the regular meeting, the finance, nominating, advisory, reference, and revisions committees will meet.

On Thursday evening, entertainment will include a trip on the Riverboat Commodore and dinner at Green Shores. There will be a "Get-Acquainted Hour" on board, with Mrs. Zedler as the hostess.

Registration will continue Friday, Sept. 29, and coffee will be served from 8:30 a.m. until the School of Instruction begins at 9:30 a.m. Everyone will be encouraged to visit the Information Centers prepared by the individual state chairmen.

Round table discussions will be held and evaluated. Mr. W. P. Strube, Jr., Houston, will give a presentation entitled "Our Role in Fighting Communism". A luncheon in the headquarters building at 11:45 a.m. will be followed by a brief meeting. Mrs. William D. Nicholson, Freeport, is chairman of the conference and Mrs. Eugene P. Schoch, Austin, is the co-chairman. Mrs. George Hilliard, Jacksonville, is state program chairman.

Auxiliary members are invited to attend the Public Relations Conference and Orientation Program for physicians on Sept. 30.

Minimal Care Unit Is Economical

A new minimal care unit at North Carolina Baptist Hospital, Winston-Salem, N. C., saves the patient money and frees regular hospital beds for patients who need intensive care. Similar units in several Texas hospitals are proving useful.

After a patient survey in the North Carolina institution showed that on almost any day at least one patient in five and sometimes one in three did not require full professional hospital care, it was decided to convert a former student nurses' residence to a minimal care unit. It has 80 rooms, each with private bath, telephone, and remote-control TV. There are also lounges, a barber shop and beauty shop, housekeeping areas, a nurses' station and dispensary, examining room, and other facilities.

The new unit "gave the hospital the equivalent of a sizeable new wing at a cost of $10,000 per bed at a time when it costs more than twice as much per bed to build and equip a hospital," said Robert Walker, administrative assistant, who has described the operation of the unit in *Hospitals*.

Rooms in the minimal care unit cost from $7 to $12 a day, compared with $13.50 for the least expensive ward bed in the hospital. The main factor in the cost difference is that the minimal care unit employs only one person for every three patients, while the hospital has 2.71 employees per patient.

This display illustrates the effectiveness of automobile seat belts in preventing injury in case of collision. When the lever is pressed, the model cars collide, and the driver not held in place by a seat belt is hurled out of the car. This exhibit will be part of a display on traffic safety which will be set up during the Woman's Auxiliary Fall Executive Board Meeting in Austin Sept. 28 and the School of Instruction the following day.

Texas Poison Control Centers

City and Address	Telephone	Director and Asst. Dir.	Type of Service
ABILENE Poison Control Center Hendrick Hospital 19th and Hickory Streets	OR 4-3551 Ext. 84	J. P. Gibson, M.D. Beth Harrington	*
AMARILLO Poison Control Center Northwest Texas Hospital Emergency Room 2203 West Sixth	DR 6-4431 Ext. 211 212	Patrick Oles, M.D.	*
AUSTIN Poison Control Center Emergency Room Brackenridge Hospital	GR 8-8571 Ext. 220 240	A. L. Exline, Jr., M.D.	*
BEAUMONT Southeast Texas Poison Control Center, Emergency Room, Baptist Hospital	TE 3-7409	Harold H. Bevil, M.D.	*
CORPUS CHRISTI Poison Control Center, Memorial Hospital, Medical Library, 2606 Hospital Bldg., Box 5008	TU 4-4511	Meyer Kurzner, M.D.	†
DALLAS Poison Control Center Parkland Memorial Hospital 5201 Harry Hines Blvd.	LA 6-7611 Ext. 402 450	Morton F. Mason, Ph.D. Chas. T. Ashworth, M.D. Medical Director	*
EL PASO Poison Control Center R. E. Thomason General Hospital 4815 Alameda Avenue	KE 2-5681 Ext. 20	F. H. Van Wagoner, M.D.	†
FORT WORTH Poison Control Center W. I. Cook Memorial Hospital 1212 West Lancaster	ED 6-5521 Ext. 64 NIGHT: ED 6-5522	Edward M. Wier, M.D. Manual Bejar, M.D.	†
GALVESTON Poison Control Center Medical Branch Hospital The University of Texas 8th and Mechanic Streets	SO 5-5541 Ext. 596	Armond Goldman, M.D.	*
GRAND PRAIRIE Poison Control Center, Mid-Cities Memorial Hospital, 2733 Sherman Road	AN 4-1651	W. Herbert Locke, D.O. Harriette M. Stewart, D.O.	†
HARLINGEN Poison Control Center Valley Baptist Hospital Emergency Room Entrance	GA 3-1224 Ext. 23	George L. Gallaher, M.D.	*
HOUSTON Gulf Coast Poison Information Center, Suite 17, Hermann Professional Building	JA 6-3731 JA 6-3732	Robert A. Wise, M.D. Attention: Mr. Bill Robertson	‡
LAREDO Poison Control Center Mercy Hospital Emergency Room	RA 2-2431 Ext. 29	S. H. Graham, Jr., M.D.	*
ODESSA Poison Control Center Medical Center Hospital 600 West Fourth Street	FE 7-7311	William D. Furst, M.D.	*

SAN ANGELO Poison Control Center Shannon West Texas Mem. Hospital 9 South Magdalen Emergency Room Entrance	2146-1 Ext. 221	H. M. Anderson, M.D. Attention: Mr. Sam Lawhon	†
SAN ANTONIO Poison Control Center Robert B. Green Mem. Hospital Emergency Room Entrance 515 Morales Street	CA 2-9230	John W. Simpson, M.D.	*
TYLER East Texas Poison Information Center, Smith County Medical Society, 2817 Fry	LY 2-0531	J. Ernest Alexander, M.D.	*
WACO Poison Control Center Hillcrest Hospital	PL 3-1412	F. William Hoehn, M.D. Attention: Mr. Tom Wallace	‡
WHARTON Poison Control Center Caney Valley Memorial Hospital 503 North Resident Street	LE 2-1440	L. B. Outlar, M.D.	*
WICHITA FALLS Poison Control Center Emergency Room Entrance Wichita General Hospital	322-6771	William L. Rector, M.D. Attention: Mr. Frank Schuler	*

* Information, Treatment, and Public Health Education.
† Information and Treatment.
‡ Information and Public Health Education.

Poison Control Centers Number 460 in Country

The National Clearing-house for Poison Control Centers reports that 460 local centers now are affiliated. The National Clearing-house serves local centers by providing information on new products which it obtains through voluntary arrangement with manufacturers.

The National Clearinghouse for Poison Control Centers provides local centers with information on new products which it obtains through a voluntary arrangement with manufacturers. More than 200 major producers of drugs and household products inform the clearinghouse of the ingredients their products contain and the antidotes for them.

The Public Health Services' Division of Accident Prevention, headed by Assistant Surgeon General A. L. Chapman, directs the clearinghouse.

Dr. Chapman notes that many parents do not recognize the poisonous qualities of many common products and they therefore delay too long sometimes before calling a physician.

"Many serious consequences of poisoning could be prevented if parents called physicians promptly without waiting for symptoms to appear," he said.

At the top of the accident list for fatalities to small children is aspirin. About 50 per cent of the substances swallowed are medications, but other harmful products include kerosene, bleaches, detergents, soaps, waxes, polishes, lighter fluids, cosmetics, insecticides, and herbicides.

The centers maintain records of ingredients of trade-name products plus antidotes and this information is available by telephone to physicians day or night. Parents who call the centers are given first-aid instructions and are advised to call their doctor.

A new law, the Hazardous Substances Labeling Act enacted by Congress last year and administered by the Food and Drug Administration, should assist in the work of personnel in poison control centers. The law requires that safety information be given on labels of household chemical products, including the identity of hazardous ingredients, antidotes for toxic substances, and warnings and precautions needed for safe use.

The law is not fully in effect yet; however, it is now enforced on highly toxic and flammable substances. Beginning Feb. 1, 1962, requirements for labeling other hazardous articles are scheduled to go into effect.

State Health Department Plans October Workshops

Five workshops of interest to physicians are being offered by the State Health Department in Austin during October. They are as follows: Laboratory Assistants Workshop, Oct. 5-7; Mycology Workshop, Oct. 11-13; Public Health Microbiology and Fluorescent Microscopy, Oct. 18-21; Virology Workshop, Oct. 23-27; Parasitology Workshop, Oct. 30-Nov. 1.

Inquiries may be directed to J. V. Irons, Sc.D., Director of Laboratories, 1100 West 49th Street, Austin 5.

Present Status of Poliomyelitis Vaccine

In spite of the availability of an effective vaccine, poliomyelitis continues to be an important public health problem. The incidence of this disease has been drastically reduced in recent years, yet among paralytic cases there has been an interesting shift in the ratio of polio virus by type. In 1959, almost 90 per cent were Type I and 10 per cent were Type III. In 1960, approximately 73 per cent were Type I and 26 per cent were Type III. Provisional data in 1961 indicate that the distribution is roughly 50 per cent for each type. At present, Type II is seldom seen.

On August 17, 1961, Dr. Luther L. Terry, Surgeon General of the U. S. Public Health Service, announced that a license to manufacture live, oral polio vaccine, Type I, had been granted and that epidemic reserves would become available.

"I want to emphasize," Dr. Terry stated, "that an oral vaccine providing protection against all three types of poliomyelitis will *not* be available for some time. The vaccine being licensed today produces immunity only against Type I polio. Therefore, it is of the highest importance that vaccinations continue with the Salk vaccine which is the only weapon we have today to provide protection against all three types of polio."

The Surgeon General has specifically stated that an epidemic reserve of oral vaccine, Type I, will be available only when three cases of poliomyelitis occur in a community within a month, two of which are confirmed to be Type I by laboratory analysis.

In the event of such an epidemic, adequate community organization and medical leadership are essential to insure rapid and complete coverage of the population under 50 years of age. Agreement should be made to make the vaccine available without charge for the epidemic reserve, and all requests for the vaccine should be channeled through the Texas State Department of Health. Type I oral vaccine will become available for commercial use simultaneously with the availability of the epidemic reserve.

Until all three types are available in oral form, State Health Department officials strongly urge continued use of the Salk vaccine, which immunizes against all three types of poliomyelitis.

Personals

Dr. J. Wade Harris of Houston was elected Vice President of the American Proctologic Society which met in Pittsburgh, Pa.

Awarded first prize for the best scientific exhibit at the American Proctologic Society meeting in Pittsburgh, Pa., was an exhibit by Hermann Hospital, Houston, entitled "Total Colposcopy". *Drs. John E. Cogan, Mylie Durham, Jr., James M. Hampton, and J. Wade Harris* presented the exhibit.

Karen Scott Randall, born July 7, is the newest member of the *Albert G. Randall* family of Amarillo.

Dr. Hodges McKnight, Fort Worth, regional medical director for American Airlines, has received a pin commemorating 30 years of service to the airline.

Dr. John J. Sloan is the new president of the Corpus Christi District Heart Association, and *Dr. William E. Morris* is chief of the Cardiovascular Diagnostic Clinic.

Mrs. John C. Thomas of Austin, mother of *Dr. John F. Thomas* of Austin and the wife of the late *Dr. John C. Thomas,* died August 21.

Fluoride Toothpaste Tested in Texas

The Colgate-Palmolive Company has announced that market testing will be done in the Texas area for a new fluoride toothpaste, "Cue".

The company's research division has been working on fluoride formulations for many years; one of the chief difficulties has been to attain a dentifrice in which the stannous fluoride component will remain stable for weeks or even months.

AMA Announces Results of M.D. Physicals

During the recent New York meeting of the American Medical Association, approximately 1,900 physicians received physical examinations.

Electrocardiograms revealed heart abnormalities in 17.7 per cent of the physicians examined. Chest roentgenograms showed suspected tuberculosis in 5.3 per cent, other lung abnormalities in 6.1 per cent, cardiovascular abnormalities in 6.7 per cent, and other conditions in 6.7 per cent.

Doctor:

View from childhood

A symbol of authority, a person to fear, a cause of pain, a source of help—children see their doctors as these things. Some speak of the doctor who doesn't talk to them, and to whom they must not speak.

Dr. Elizabeth Gellert, assistant professor of pediatrics and psychiatry at Albert Einstein College of Medicine, undertook to find out how well children understand illness and the parts of the body. Her report is published in the June 2 issue of *Medical News*.

In contrast with the strong impressions of the doctor, children have a hazy idea about nurses and other ancillary personnal. Their concept of the cause of illness is closely linked with feelings of guilt. Many said, "If you don't do what your mothers and fathers tell you, you'll get sick." Surprisingly, children showed an understanding of illness caused by psychological factors. A few commented, "She got sick because she didn't want to go to school."

Children, even 4½ to 6 year olds, had a fairly good idea of where the heart is located. As for nerves, their concept of them went something like this:

Interviewer: Do you have nerves?

Nine-year-old: Yes.

Interviewer: Does anyone else?

Nine-year-old: Maybe my cousin's mother—she worries too much.

Lung TB Relapse Rate Dropping, Report Shows

A steady drop in relapse rates for patients treated for tuberculosis of the lungs is shown by an eight year study from the Memphis, Tenn., Veterans Administration Hospital.

The findings are on 321 patients discharged with medical approval from this hospital during the period January 1, 1947, through December 31, 1954.

About 30 per cent of those discharged from 1947 through 1952 have suffered a relapse of active tuberculosis. About 23 per cent of those discharged in 1953 and only 8 per cent of those discharged in 1954 have relapsed.

Factors responsible for the marked decline are thought to be increased knowledge and experience in use of the anti-TB drugs and better techniques and understanding of surgical procedures. Importance of effective drug treatment for a period of at least 12 months seems especially apparent.

Doctor Founded Camp Fire Girls

In the early days, Camp Fire Girls had pockets in their hats. "Pockets mean efficiency, order, having what you need handy, yet the hands are left free to take hold of the next thing."

This fashion innovation was typical of the thinking of Dr. Luther Halsey Gulick, founder of Camp Fire Girls, Inc. Celebrating their 50th anniversary this year, Camp Fire Girls follow another of the New York physician's ideas, a revolutionary one for his time—he believed that girls would be more interested in exercise and outdoor life if they were dressed with comfort and freedom instead of in long skirts and rigid girding corsets. Girls who attended the camp he sponsored wore full blue bloomers, white middies, blue ties, and ribbon bands around their heads.

Physical training was Dr. Gulick's primary interest; he held several positions in that field and was director of the department of child hygiene at the Russell Sage Foundation. He was a prolific writer on subjects of physical fitness.

In 1910, he founded the Camp Fire Girls to help emphasize the importance of physical health and fitness, stress femininity, and combine fun and friendship with constructive, character-building activities. He died in 1918, but the organization he founded has continued to grow and to enrich the lives of young girls throughout the world.

"Tips" Is AAGP Theme

Drs. Vernon Cushing, allergist, Oklahoma City; R. M. Sheppard, Jr., thoracic surgeon, Tulsa; and Arthur Grollman, internist, Dallas, were the principal speakers at the September 10 meeting of the Red River Valley section of the American Academy of General Practice.

Theme of the program was "Tips—Diagnostic and Therapeutic."

Texans Fill Nuclear Medicine Posts

Dr. J. R. Maxfield, Jr., Dallas, and Dr. Herbert C. Allen, Jr., Houston, have been named president elect and vice president, respectively, of the Society of Nuclear Medicine. A third Texan, Frank Norton, LL.B., Dallas, is serving a three year term on the board of trustees.

The next meeting of the society will be in Dallas in June, 1962.

Confusion Reported on Keeping Narcotic Prescription Records

A recent statement in a national medical magazine has caused concern among Texas physicians, reports Mr. Philip R. Overton, General Counsel for Texas Medical Association. The July 17 issue of *Medical Economics,* page 149, contained the statement: "The law requires you to keep copies of the prescriptions you give for narcotics."

Neither federal laws nor the Texas Uniform Narcotic Drug Act require this procedure. Both federal and state laws do require the pharmacist filling such prescriptions to retain them for two years, but no such record is required of the prescribing practitioner.

There are some states that have a so-called "triplicate prescription law" which requires prescriptions, made out in triplicate, to be filed and retained by the practitioner, pharmacist, and state agency. The practitioner keeps a copy and sends two copies to the pharmacist. The pharmacist keeps one copy and forwards the remaining copy, which he signs and marks indicating that the prescription was filled, to the controlling state agency. The article as it appeared in *Medical Economics* might have originated in a state having such a law. Texas does not have this requirement.

As a practical matter, the practitioner should maintain records of his prescription for narcotics to protect him from possible malpractice suits. The practitioners' records, either by a copy of the prescription issued or by the same information contained in the patient's file, should be kept for two years after treatment to comply with the statute of limitations.

Hints on Hanky-Panky

In mid-July, Dr. Herbert C. Allen of Houston received through the mail a handkerchief and an appeal for money from Mr. Alfonso B. Fernandez, a "Cuban Refugee". Dr. Allen was suspicious, and wrote the Miami, Fla., chamber of commerce for information about this method of raising funds.

The executive director of the better business division, Mr. John G. Proctor, replied that representatives of the local Cuban Relief Center know nothing of a Mr. Alfonso B. Fernandez or his efforts to aid his countrymen. Mr. Proctor also stated that the U. S. government has provided administrative personnel, headquarters, and adequate appropriations for Cuban relief, and there appears to be no need for individual or group solicitation at this time.

Positioner Makes Roentgenograms of Infants Easier

A new positioning device has been developed to simplify upright chest radiography on infants from birth to six months of age.

The device consists of a linen bag and a rotating plastic disk combination that holds infants too young to sit in a chair.

Designers were Mrs. Hilda E. Drum, assistant professor of radiological technique at the University of Oregon Medical School, and her collaborator, Dr. James B. Haworth, associate professor of radiology.

The new positioner, as reported in *Medical News,* is easier and safer for the technician and more comfortable for the baby. Mrs. Drum reported that several infants at the university hospital had been so comfortable that they had fallen asleep.

The bag is covered with lead rubber to protect the gonads and is hung from the disk. The infant is placed in the bag which has holes cut in front for the baby's legs and cloth wrist binders. The latter are also attached to the disk and hold the infant's arms on high.

A cloth sash is tied around the chest, holding the infant's back against a curved plastic support. If needed, a cloth band is placed around the baby's forehead to hold his head.

It is unnecessary to reposition the infant since the disk is simply rotated. In addition, it is not necessary for anyone to hold the child, thus avoiding radiation hazard for the technicians.

Study Discounts Popular Theory On Fertility After Adoption

Three West Coast physicians have completed a study which tends to disprove the popular belief that a childless couple who adopts a child is more likely to conceive afterwards.

Dr. A. Lawrence Banks of Seattle and his colleagues, Drs. R. N. Rutherford and W. A. Coburn, have studied 31 infertile couples over periods ranging from one to nine years after adoption of the children. Only one woman in the group later underwent a normal pregnancy—this followed myomectomy, lysis of pelvic adhesions, and tubal lavage. It is unlikely that conception was due to any type of emotional or organic change produced by the adoption.

Included in the study group were 11 couples in whom no physical or emotional reason could be found for prolonged infertility. None conceived following adoption.

Earlier, workers in public adoption agencies had found that later pregnancies by adoptive parents were less than the normal ten per cent of spontaneous infertility cures. Dr. Banks says that the belief that adoption spurs fertility should be refuted "as a humanitarian service to our patients."

Hospital Meal Costs Average $3.64 Daily

The cost of preparing patient meals in the nation's hospitals averages $3.64 per patient day, according to a report in a recent *The Modern Hospital* magazine.

The cost of feeding patients is one of the largest hospital operating expenses. Nationally the cost per patient day ranges from a low of $2.11 in city, county, and state hospitals in the South and Southwest to $5.88 in hospitals of 250 or more beds in the western states.

Dallas Announces Plans For New Hospital by 1964

Construction is expected to begin in 1962 on the Presbyterian Hospital of Dallas, first major hospital to be added to that community since 1927. Estimated cost is $7,500,000. The 350 bed general hospital will be located on a 71 acre site in the northern section of Dallas off its central expressway. Completion is planned for late 1964.

A cooperative agreement between the hospital and the University of Texas Southwestern Medical School will provide a major teaching program at both the undergraduate and graduate levels.

Recognition Planned For Body Donors

Dr. Benjamin Spector of Tufts University has been appointed to direct a National Society for Medical Research program to recognize persons who will their bodies for medical use. The Society will present a wallet card to donors and conduct a general public education program "to make the donation of bodies as common throughout the United States as it has come to be in a few enlightened communities." The July *Reader's Digest* carries an article on the subject.

Houston Doctors Prepare Film

A new film, "Cardiac Surgery in Newborn Infants," has been prepared by Drs. Denton A. Cooley and John L. Ochsner, Baylor University School of Medicine, Houston. Early palliative treatment of complete transposition of the great vessels is shown. The operation creates an interatrial defect, permitting the mixing of unoxygenated and oxygenated blood. Thus relieved of severe cyanosis, the children can survive to an age when an attempt at total correction of their gross defect can be made. Of 28 infants undergoing this procedure during the past two years, 23 have survived with improvement. *Medical News* presented the report in its June 2, 1961, issue.

"I hope you have pancreatitis. That's what I picked in the pool."

Bexar County Medical Society Dedicates Library Building

Dedication ceremonies were held in September for the new Bexar County Medical Library Building which houses the library, the county medical society, and the International Medical Assembly of Southwest Texas. Dr. George M. Fister of Ogden, Utah, President-Elect of the American Medical Association delivered the dedication address. He was introduced by Dr. J. B. Copeland of San Antonio, A.M.A. delegate.

Participants in the September 17 dedication ceremonies also included Dr. James W. Laurie, President of Trinity University, San Antonio, invocation; Dr. L. Bonham Jones, president of Bexar County Medical Society, welcome; Dr. William H. Heck, president of the Bexar County Medical Library Association, remarks; Dr. David Jacobson, Rabbi of the Temple Beth-El, San Antonio, prayer of dedication; Dr. Harvey Renger, President of Texas Medical Association, remarks; Rt. Rev. Monsignor Roy Rihn, pastor of St. Pius X Church, San Antonio, benediction. Mrs. Vernon Mayfield played organ selections before the ceremony.

The structure, at 202 West French Place, was built at a cost of $310,000, including new furniture, equipment, and fixtures. The land is valued at approximately $80,000, and the rare books, journals, and textbooks are valued at more than $100,000.

Designed for efficiency of operation, the architecture of the building is contemporary. The Assembly Room on the second floor will seat 300 persons for meetings.

Other features of the building include a view of the city through full height window walls in the auditorium which are protected from the exterior by a bronze finish solar screen. The screen, a unique feature of the building, is made of anodized aluminum.

The library on the second floor is equipped with soundproof study cubicles. The Rare Book Room, located on the first floor, is completely walled with indirectly lighted bookcases and is provided with a large table for board meetings. Other features include a large lounge for committee meetings and other functions, a snack room, a large vault for preservation of society and library records, a kitchen, and basement storage space.

Drug Concentration Technique Helpful in Cancer Treatment

A method of treatment for cancer has produced such good results in early testing that its use is being explored in cancers of all types at 24 Veterans Administration hospitals across the nation.

Local infusion of amethopterin (Methotrexate) enables large amounts of a cancer-destroying drug to be concentrated at the site of the tumor, while the rest of the body is protected against the drug by means of an antidote.

Dr. Robert D. Sullivan of the Manhattan, N. Y., VA hospital, in cooperation with Dr. Marguerite P. Sykes of Sloan-Kettering Institute for Cancer Research in New York City, and others have pioneered in the development of this technique.

Infusion has been used in cancers of the head and neck and some pelvic cancers, including those of the cervix. Infusion of other body areas is under development. In a substantial percentage of cases, improvement has resulted. In some cases, the results have been striking. The tumors have shrunk, and in some patients all signs of the cancer have disappeared for as long as 18 months. There is no proof yet that the disappearance will be permanent.

In cases in which the tumor did not disappear, it occasionally was reduced enough in size to allow effective surgery. In some cases in which the tumor disappeared and began to grow again, further treatment by infusion produced a remission.

Amethopterin destroys the vitamin, folic acid, without which cancer cells die. The drug is pumped directly into the artery that supplies the cancer with blood, so that the concentration is highest in the tumor area. The antidote, citrovorum factor, is injected into the patient's muscles several times a day, to protect the rest of the body from the amethopterin that escapes from the cancerous area. The treatment is continuous over periods as long as three weeks. To make sure that the amethopterin will go directly into the tumor and be concentrated there, doctors test the blood supply to the cancer. A dye is pumped into the artery believed to be supplying the cancer. If the artery is the one into which the cancer-fighting drug should go, the entire tumor will glow under ultraviolet light.

A sterile, disposable diaper designed for infants who weigh less than 10 lbs. has been developed by Johnson and Johnson. Since these diapers are used only once and then discarded, chances of cross-infection through diapers is virtually eliminated. Each diaper is individually packaged, and the cost per diaper is comparable to either hospital laundered or diaper service diapers.

O Adolescence, O Adolescence,
I wince before thine incandescence.
Thy constitution young and hearty
Is too much for this aged party.
Thou standest with loafer-flattened feet
Where bras and funny papers meet.
When anxious elders swarm about
Crying "Where are you going?" thou answerest "Out,"
Leaving thy parents swamped in debt
For bubble gum and cigarettes.
Thou spurnest in no uncertain tone
The sirloin for the ice-cream cone;
Not milk, but cola, is thy potion;
Thou wearest earrings in the ocean,
Blue jeans at dinner, or maybe shorts,
And lipstick on the tennis courts.
Forever thou whisperest, two by two
Of who is madly in love with who.
The car thou needest every day,
Let hub caps scatter where they may.
For it would start unfriendly talk
If friends should chance to see thee walk.
Friends! Heavens how they come and go!
Best pal today, tomorrow foe,
Since to distinguish thou dost fail
Twixt confidante and tattletale,
And blanchest to find the beach at noon
With sacred midnight secrets strewn.
Strewn! All is lost and nothing found.
Lord, how thou leavest things around!
Sweaters and rackets in the stable,
And purse upon the drugstore table,
And cameras rusting in the rain,
And Daddy's patience down the drain.
Ah well, I must not carp and cavil,
I'll chew the spinach, spit out the gravel,
Remembering how my heart has leapt
At times when me thou did accept.
Still, I'd like to be present, I must confess,
When thine own adolescents adolesce.

—Ogden Nash.

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A Bibliography On Adolescence

Adolescence, Brit. M. J. 5194:281-282 (July 23) 1960.

Allen, W. C.: School Personnel and the Onset of Menstruation, Missouri Med. 58: 236-239 (March) 1961.

Barnes, F. E., Jr.: Vitamin Supplements and the Incidence of Colds in High School Basketball Players. A Preliminary Report, North Carolina M. J. 22:22-26 (Jan.) 1961.

Baum, H. C.: Gynecology Problems in the Adolescent, M. Clin. North America 45:23-29 (Jan.) 1961.

Brooksaler, F., and Krafft, C. J.: Adolescents and Their Medical Care, Texas J. Med. 56:418-420 (June) 1960.

Bruch, H.: Psychological Aspects of Obesity in Adolescence, Am. J. Pub. Health 48: 1349 (Oct.) 1958.

Chapman, A. H.: On Managing Adolescents, J.A.M.A. 174:1954-1957 (Dec. 10) 1960.

Coolidge, J. C.; Willer, M. L.; Tessman, E.; and Waldfogel, S.: School Phobia in Adolescence: A Manifestation of Severe Character Disturbance, Am. J. Orthopsychiat. 30:599-607 (July) 1960.

Dalton, K.: School Girls' Behavior and Menstruation, Brit. M. J. 5213:1647-1649 (Dec. 3) 1960.

Darling, C. D.: Emotional Problems of the Child and Adolescent, New York J. Med. 58:49-53 (Jan. 1) 1958.

English, O. S.; Katz, M.: Scheflen, A. E.; Danzig, E. R.; and Speiser, J. B.: Preparedness of High School and College Seniors for Parenthood, Arch. Neurol. & Psychiat. 81:469-479 (April) 1959.

Ephebiatricians: Bobby-Socks' Doctors, J. Mississippi M. A. 1:171-172 (April) 1960.

Gallagher, J. R.: About People, Not Injuries, Am. J. Surg. 98:332-336 (Sept.) 1959.

Gallagher, J. R.: The Adolescent and Pediatric Education, Pediatrics 19:937-939 (May) 1957.

Gallagher, J. R.: Adolescents and Their Medical Care, Connecticut M. J. 23:649-652 (Sept.) 1958.

Gallagher, J. R.: General Principles in Clinical Care of Adolescent Patients, Pediat. Clin. North America 7:185-196 (Feb.) 1960.

Gallagher, J. R.: Problems of the Adolescent, Pediat. Clin. North America 5:775-787 (Aug.) 1958.

Gallagher, J. R., and Harris, H. I.: Psychiatry: Behavioral Problems in the Adolescent, Ann. Rev. Med. 11:275-288, 1960.

Gallagher, J. R.; Heald, F. P.; and Masland, R. P.: Recent Contributions to Adolescent Medicine, New England J. Med. 259:24-31, 74-81, 123-130 (July 3, 10, 17) 1958.

Gardner, L. I.: Biochemical Events at Adolescence, Pediat. Clin. North America 7:15-31 (Feb.) 1960.

Glaser, K.: Conflicts and Rebellion During Adolescence, Pediatrics 26:839-845 (Nov.) 1960.

Gray, L. A.: Gynecology in Adolescence, Pediat. Clin. North America 7:43-63 (Feb.) 1960.

Heald, F. P., and Sturgis, S. H.: Adolescent Gynecology—A 5-year Study, Pediatrics 25:669-677 (April) 1960.

Heald, F. P.: Obesity in the Adolescent, Pediat. Clin. North America 7:207-220 (Feb.) 1960.

Herford, M. E.: The Adolescent in Industry, Public Health 74:43-48 (Nov.) 1959.

Herskovitz, H. H.; Levine, M.; and Spivack, G.: Anti-social Behavior of Adolescents from Higher Socio-Economic Groups, J. Nerv. & Ment. Dis. 129: 467-476 (Nov.) 1959.

Hollingshead, A. B.: A Sociologic Perspective on Adolescence, Pediat. Clin. North America 7:131-145 (Feb.) 1960.

Ingram, J. T.: Dermatological Problems of Adolesence, Practitioner 184:308-315 (March) 1960.

Johnston, J. A.: Metabolic and Nutritional Considerations in Adolescence, Pediat. Clin. North America 7:33-42 (Feb.) 1960.

Kanner, L.: Problems of Adolescence, J. Pediat. 55:397-404 (Sept.) 1959.

Knowles, H. C., Jr.: Management of the Adolescent Diabetic Patient, Postgrad. Med. 26:766-772 (Dec.) 1959.

Koegler, R. R.: Chronic Illness and the Adolescent, Ment. Hyg. 44:111-114 (Jan.) 1960.

Landis, E. E.: Hospital Treatment and Re-education of the Disturbed Adolescent, South. Med. J. 52: 1119-1124 (Sept.) 1959.

Little, S.: Psychology of Physical Illness in Adolescents, Pediat. Clin. North America 7:85-96 (Feb.) 1960.

Lurie, P. R.: The Adolescent and Athletics, Cardiac Aspects, Pediat. Clin. North America 7:173-184 (Feb.) 1960.

Masland, R. P.: Ulcerative Colitis, Pediat. Clin. North America 7:197-206 (Feb.) 1960.

Masterson, J. F., Jr.: Prognosis in Adolescent Disorders, Am. J. Psychiat. 114:1097-1103 (June) 1958.

Nixon, R. E.: Emotional Problems of the Adolescent Girl, Pediat. Clin. North America 789-801 (Aug.) 1958.

Noshpitz, J. D.: The Antisocial or Asocial Adolescent, Pediat. Clin. North America 7:97-114 (Feb.) 1960.

Pincock, C. S.: Practical Approach to Adolescent Problems, J. Am. M. Women's A. 15:586-589 (June) 1960.

Rabinovitch, R.: Psychology of Adolescence, Pediat. Clin. North America 7:65-83 (Feb.) 1960.

Roth, D., and Blatt, S. J.: Psychopathology of Adolescence, Arch. Gen. Psychiat. 4:289-298 (March) 1961.

Senn, M. J.: Some Learning Problems in Adolescence, Pediat. Clin. North America 7:115-130 (Feb.) 1960.

Shaw, E. B.: The Adolescent and the Practitioner, Pediat. Clin. North America 7:3-14 (Feb.) 1960.

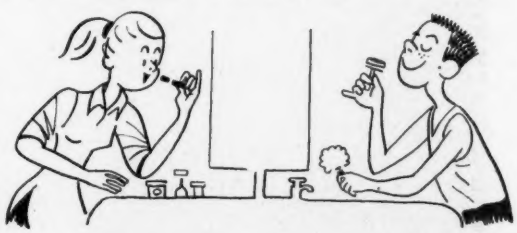
Sigmond, H.: The Adolescent and Athletics, Pediat. Clin. North America 7:165-172 (Feb.) 1960.

Spence, A. W.: Endocrinological Problems of Adolescence, Practitioner 184:283-300 (March) 1960.

Tanner, J. M.: The Development of the Female Reproductive System During Adolescence, Clin. Obstet. Gynec. 3:135-145 (March) 1960.

Wilson, H.: Psychological and Psychiatric Disturbances in Adolescence, Practitioner 22:399-405 (Nov.) 1959.

Young, C. M.: Eating Problems in Adolescence, New York J. Med. 61:939-943 (March 15) 1961.



Newly Acquired Films

NEW LIFE FOR LISA (1961) sound, color, 28 min., 16 mm., D-78.

Through the advice and guidance of the high school counselor, a young girl's dream of becoming a nurse is realized. The film shows the training and opportunities available in various fields of nursing. After she chooses surgical nursing, the film most graphically follows her through the crucial open-heart surgery on little Lisa, 8 years old, who because of the specialized knowledge of each member of the surgical team in the operating room lives, and is well.

This film is highly recommended for nurse recruitment.

JERKS THAT IRK n.d., sound, color, 10 min., 16 mm., B-47.

Traffic safety is promoted by spotlighting bad driving habits that irk other drivers into making mishaps. An average driver sees various thoughtless and dangerous acts of others, and finally loses his temper and has an accident himself. Animated.

New Books

Adams, J. M.: Newer Virus Diseases, New York, Macmillan, 1960.

Ciba Foundation Symposium: Nature of Sleep, Boston, Little, Brown, 1961.

Colby, F. H.: Pyelonephritis, Baltimore, Williams and Wilkins, 1959.

Congress on Occupational Health: 1960 Proceedings, New York, Book Craftsmen, 1961.

Cunningham, R. M., Jr.: Hospitals, Doctors, and Dollars, New York, Dodge, 1961.

H. J. Heinz Co.: The Heinz Handbook of Nutrition, New York, McGraw-Hill, 1959.

Henry Ford Hospital International Symposium: Biology of Pyelonephritis, Boston, Little, Brown, 1960.

Jones, H. W.: Hemaphroditism, Genital Anomalies and Related Endocrine Disorders, Baltimore, Williams and Wilkins, 1958.

Kassay, D.: Clinical Applications of Bronchology, New York, McGraw-Hill, 1960.

Levinsohn, F.: What Teenagers Want to Know, Chicago, Budlong, 1961.

Russ, W. B.: A Doctor Looks at Life, revised ed., San Antonio, Naylor, 1961.

Sodeman, W. A.: Pathologic Physiology, ed. 3, Philadelphia, W. B. Saunders, 1961.

Soubiran, A.: Good-bye, Doctor Roch, Garden City, Doubleday, 1961.

Turakulov, Y. K.: The Metabolism of Iodine and the Thyroid Hormone, Tashkent, The Academy of Science of the Uzbek SSR., 1959.

World Medical Association: Medicine, A Life Long Study; Proceedings of the Second World Conference on Medical Education, Chicago, 1959, New York, World Medical Association, 1961.

Gifts to the Memorial Library

Dr. Emerson K. Blewett, Austin, 351 journals.
Dr. John A. Crockett, Austin, 3 books.
Mrs. George M. Decker, Austin, 190 journals.
Dr. Mervin E. Fatter, Austin, 152 journals.
Dr. Maurice Hood, Austin, 142 journals.
Dr. Robbie C. Jordan, Austin, 34 journals.
Dr. Walter Long, Austin, 1 book.
Medical Library, Scott & White Clinic, Temple, 2,268 journals.
Dr. John R. Rainey, Jr., Austin, 111 journals.
Mrs. William S. Sanders, Jasper, 9 tapes.
Dr. Oliver W. Suehs, Austin, 120 journals.
Dr. C. M. White, Beaumont, 56 books.
Dr. Paul L. White, Austin, 334 journals.
Dr. C. E. Willingham, Tyler, 46 books.
Dr. Edward Zidd, Austin, 882 journals.

A Manual of Cutaneous Medicine

DONALD M. PILLSBURY, M.A., D.Sc. (Hon.), M.D., F.A.C.P., Professor and Chairman of Department of Dermatology, University of Pennsylvania School of Medicine; Director, Commission on Cutaneous Diseases, Armed Forces Epidemiological Board; WALTER B. SHELLEY, M.D., Ph.D., F.A.C.P., Professor of Dermatology, University of Pennsylvania School of Medicine; National Consultant in Dermatology to the Surgeons General, U. S. Army and U. S. Air Force; and ALBERT M. KLIGMAN, M.D., Ph.D., Professor of Dermatology, University of Pennsylvania School of Medicine; Professor of Dermatology, University of Pennsylvania Graduate School of Medicine. 406 pages. $9.50. Philadelphia, W. B. Saunders Company, 1961.

This manual of 406 pages represents a new approach to dermatology. To quote from the preface, the goals of this volume are as follows:

"To summarize, with as much completeness as possible within a manageable number of pages, the chief useful facts regarding the diagnosis, prevention and cure of the diseases affecting the skin which are encountered frequently in daily practice."

"To summarize as succinctly and accurately as possible, those principles of physiology, chemistry, and anatomy which are most useful in promoting an

understanding of the genesis of dermatologic diseases."

"To hew to the line of as forthright and simple a terminology as possible. Eponyms have been avoided as much as possible, and Latin terms have been regarded as inappropriate to a book written in English."

"To substitute pictorial material and diagrams for written text wherever the clarity and brevity of exposition will be increased thereby. As a result, this volume is about equally divided between graphic material and text."

The authors have fulfilled all of the previously quoted goals, and have added all new drugs in treatment. The organization of material in this manual is superior to the text by the same authors published in 1956. Detailed pathology has been omitted. Many diagrams emphasizing the effect of emotion on eczema and neuro-dermatitis are cleverly presented.

This manual is a must for the library of every physician interested in dermatology.

—DUNCAN O. POTH, M.D., San Antonio.

Diverticulitis

SARA M. JORDAN, M.D., Founder and Former Head of the Department of Gastroenterology, The Lahey Clinic; staff, New England Baptist Hospital, and New England Deaconess Hospital, Boston; and RUSSELL S. BOLES, JR., M.D., staff, Department of Gastroenterology, The Lahey Clinic; New England Baptist Hospital; and New England Deaconess Hospital, Boston. 82 pages. $4.75. New York, Grune & Stratton, 1960.

This small monograph thoroughly reviews the subject, diverticulitis. Approximately one half of the book is devoted to a historical review of the years 1904-1959. The remainder reviews the pathogenesis, incidence, diagnosis, complications, and treatment of this entity with the author's comments following each section.

This readable small volume would provide the busy physician with a good review of the subject in an evening. Some physicians might disagree with Drs. Jordan and Boles' strict dietary management; few would disagree with their ideas concerning the relationship of the spastic colon to diverticulosis. It is highly recommended for both student and practitioner.

—O. ROGER HOLLAN, M.D., San Antonio.

The Story of Contact Lenses

PHILIP L. SALVATORI, 57 pages, New York, N. Y., Obrig Laboratories Inc., 1960.

P-Q-R-S-T A Guide to Electrocardiogram Interpretation

JOSEPH E. F. RISEMAN, M.D., Assistant Clinical Professor of Medicine, Harvard Medical School; Visiting Physician, Beth Israel Hospital, Boston. 168 pages. $6.50. ed. 4. New York, The Macmillan Company, 1960.

This manual is written for the beginning student of electrocardiography and follows the method of presentation used in previous editions. The present guide is enlarged and brought up to date.

The manual begins with a description of the normal components and intervals of an electrocardiogram and the normal variations as found in the conventional leads, unipolar limb leads, and multiple chest leads. The author then describes the abnormal appearance of these various components and intervals, and presents the various electrocardiographic changes as they appear in arrhythmias and disease patterns. Also shown are the effects of drugs such as digitalis and quinidine, and the effect of some of the electrolytic imbalances upon the electrocardiogram.

The guide is amply illustrated by diagrams and there are several good tables for easy reference. The author uses his teaching experience effectively in his presentation of the subject matter. He uses summaries and repetition judiciously. He emphasizes the importance of proper correlation of clinical findings with electrocardiographic findings in order to obtain proper interpretation. The requirements for a technically acceptable tracing are discussed. There is presented a brief discussion of electrophysiology as it applies to cardiography. At the end of the book, the author presents examples of actual tracings, with discussion and interpretation.

As suggested by the author, this manual is not intended to supplant text books on electrocardiography, but is a guide to be used profitably in conjunction with various texts on the subject.

—WILLIAM ROSENBLATT, M.D., Wichita Falls.

Progress in the Treatment of Fractures and Dislocations, 1950-1960

THOMAS B. QUIGLEY, M.D., Assistant Clinical Professor of Surgery, Harvard Medical School; Surgeon, Peter Bent Brigham Hospital; and HENRY BANKS, M.D., Clinical Associate in Orthopedic Surgery, Harvard Medical School; Associate in Orthopedic Surgery, Peter Bent Brigham Hospital. 83 pages. $2.50. Philadelphia, W. B. Saunders Company, 1960.

Essential Hypertension: An International Symposium

Edited by K. D. BOCK, Basle, and P. T. COTTIER, Berne. 386 pages. Berlin, Springer-Verlag, 1960.

RECENT DEATHS

DR. J. R. MARTIN

Dr. John Richard Martin, who had been in general practice in Georgetown since 1920, was found dead in his home July 28, 1961. He had suffered a heart ailment for several years, but had continued active practice until the time of his death.

Dr. Martin was born in Tundra, Texas, March 17, 1893. He was the son of Simeon and Sara Parlie (Henderson) Martin. After attending public schools in Munday, Texas, he entered Southwestern University, Georgetown, and was graduated from Tulane University School of Medicine, New Orleans, in 1919. He interned in Charity Hospital, New Orleans.

In 1920, he began practicing in Georgetown, and in 1923, he and his father and a brother, Dr. Walter Martin, opened the Martin Hospital. The family operated the hospital until 1947, when it became known as the Georgetown Hospital.

Dr. Martin was a member of the Texas and American Medical Associations through the Williamson County Medical Society, and had held all offices in his local society. At the time of his death, he was city-county health officer and staff physician at Southwestern University. He had been in military service during World War I.

Active in community affairs, he was a member of the First Methodist Church, the Williamson County Livestock Association, San Gabriel Masonic Lodge, and the Georgetown Country Club.

He was married in 1922 to Miss Mary Dena Wales of Florence. She preceded him in death in 1956.

DR. JOHN R. MARTIN

Survivors are a brother, Hobson Martin, D.D.S., Georgetown; a sister, Mrs. I. R. McCollough, Hillsboro; a niece, Mrs. D. R. Mills, Georgetown; and two nephews, Jim McCollough of San Antonio and Walter J. Martin of Georgetown.

DR. A. T. KNEIP

Dr. August Theodore Kneip, who had practiced medicine for more than 50 years, died in Houston June 4, 1961. He had been ill for two months.

Elected to honorary membership in the Texas Medical Association in 1949, he had been an active member since 1919 through the Fayette or Harris Counties Medical Societies. He also was a member of the American Medical Association.

Dr. Kneip was born in Round Top, Fayette County, Texas, September 17, 1874. After completing courses in public schools and in Blinn Memorial College in Brenham, he enrolled in the University of Texas Medical Branch, and was graduated in 1903. He practiced seven years in Burton, Texas, and nine years in Oldenburg before moving in 1923 to Houston, where he built and maintained an active general practice until he retired in 1956.

Dr. Kneip was married to Hulda Afflerbach at Round Top, Texas, in 1904.

In 1953, he returned to the Medical Branch to be honored with other members of his graduating class for having served the medical profession for 50 years.

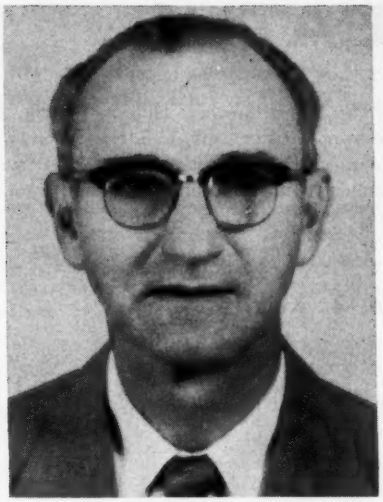
Survivors include Mrs. Kneip and a sister, Mrs. Christiana Lenhardt, both of Houston.

DR. A. I. MENA

Dr. Adalberto Insaustegui Mena, a San Antonio general practitioner for many years, died June 28, 1961, following a cerebro-vascular accident.

Born in Ciudad Del Carmen, Campeche, Mexico, November 21, 1897, he was educated in the secondary schools of Veracruz, and attended high school in Mexico City. His medical training was received at the National University Faculty of Medicine, Mexico City, from which he was graduated in 1923. He was chief of the obstetric clinic and an assistant in chemistry, bacteriology, and anatomopathology at the University of Mexico City in 1924; he also was in private practice in Mexico City from the time of his graduation until 1928.

Dr. Mena first visited the United States in 1924,



DR. A. I. MENA

and found the American way of life much to his liking. Later, when a colleague suggested that he move to San Antonio, he did not hesitate to take the opportunity. He had been in general practice there until the time of his death.

Dr. Mena was a member of the Bexar County Medical Society, Texas Medical Association, American Medical Association, Southern Medical Association, Pan American Optimist Club, Mexican Chamber of Commerce, Canyon Creek Country Club, and St. Ann's Catholic Church. He enjoyed golf when his practice permitted recreation.

Dr. and Mrs. Mena (she formerly was Maria Luisa Olvera) were married in Mexico City October 21, 1925.

Survivors are Mrs. Mena; four daughters, Mrs. Emma Pena de la Pena, Mrs. Richard (Josefina) Flores, Mrs. Joe (Mary Louise) Casseb, and Miss Juliette Insaustegui Mena; and a sister, Miss Adela Insaustegui Mena; and eight grandchildren, all of San Antonio.

DR. C. D. BAKER

Dr. Charles Davenport Baker died unexpectedly at his home in Carthage on July 27, 1961. He had had a heart condition for some time, but had remained in practice. At the time of his death, he had just returned from a fishing trip.

Dr. Baker, son of A. H. and Maggie A. (Moore) Baker, was born August 28, 1882, in Carthage. He was a member of the first graduating class of Carthage High School, attended Baylor University, Waco, for one year, and spent two years in the University of Texas Medical Branch, Galveston. He then entered Tulane University School of Medicine, New Orleans, from which he was graduated in 1908. He then began general practice in Elysian Fields (Harrison County) and remained there until 1925. Moving then to San Augustine, he practiced there for six years before settling in 1931 in Carthage, where he remained in active practice until the time of his death.

Dr. Baker was elected to honorary membership in the Texas Medical Association in 1959; he had served one year as secretary of the Panola County Medical Society and had served six terms as president. He also was a member of the American Medical Association, the Methodist Church, and the Masonic Lodge. He was the county health officer.

Fishing and fox hunting were his favorite sports.

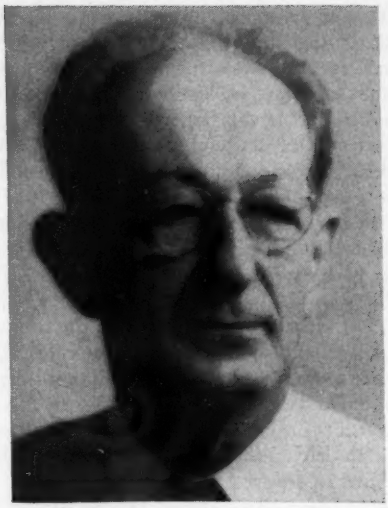
Miss Minnie A. Crews and Dr. Baker were married November 21, 1904, in Opelousas, La. Survivors include Mrs. Baker, a son, A. W. Baker; two daughters, Misses Maurine and Mary Louise Baker, all of Carthage; and a sister, Mrs. L. A. Crews, Dallas; and two grandchildren.

DR. C. D. BAKER

DR. M. E. PARKER

Dr. Marshall Eddy Parker, who had served Anderson, Texas, and Grimes County residents for 47 years, died at his home June 29, 1961. Death resulted from arteriosclerotic heart disease. He was 81.

Although born in Somerset, Ky., in 1879, he had spent most of his life in Texas, and began practicing



DR. M. E. PARKER

medicine in Anderson in 1914. Previously, he had practiced in Louisville, Ky., and Waterman, Texas. In those days, Dr. Parker made all of his calls on horseback because the stumps were too high for a buggy.

In addition to his practice, he served for 30 years as Grimes County health officer. His hardest year, he recalled, was in 1918 when he was the only doctor in the area during the influenza epidemic.

The physician of 55 years retired from active practice only six months before his death.

Son of Kate (Grinstead) and Marshall Emory Parker, he moved to Texas at the age of 3. He was educated in the public schools of Honey Grove, and gained his medical education at Louisville Medical College, Louisville, Ky. He interned at the Louisville City Hospital in 1906. A past president of the Grimes County Medical Society, he was elected to honorary membership in the Texas Medical Association in 1952; he also was a member of the American Medical Association, the Masonic Lodge, and the First Methodist Church.

Survivors include Mrs. Parker of Anderson; two sons, Marshall E. Parker, Houston, and Robert Franklin Parker, Tulsa; four grandchildren, and two great grandchildren.

DR. T. D. VAUGHAN

Dr. Thomas Davis Vaughan, who had practiced in Bertram since 1921, died in Reno, Nev., July 1, 1961. He suffered a heart attack while enroute home from a vacation in California.

Born January 7, 1890, in Bertram, he was a member of a pioneer family. His father, Captain Thomas D. Vaughan, pioneered that country when Indians still were a threat; he owned the land on which the town of Bertram was founded, and the town's park is dedicated to his memory. His mother was Elizabeth Barton Vaughan.

Reared and schooled in Bertram, Dr. Vaughan took his pre-medical training at Southwestern University, Georgetown, and was graduated from the University of Texas Medical Branch, Galveston, in 1915. He later took postgraduate work in pediatrics in New York. He began practicing in Taylor in 1915, but joined the U. S. Army in 1917 and was stationed at a military base hospital in Brownsville. In 1921, he opened his office in Bertram, but after eight years he was persuaded to join his cousin in practice in Amarillo.

But Dr. Vaughan preferred his native hill country, and after two years he returned to Bertram where he remained throughout his career.

DR. T. D. VAUGHAN

In the spring of 1946, when Dr. Vaughan requested a leave of absence to rest from the strain of the busy war years, the townspeople gave him a surprise party. Friends from as far away as Sheridan, Wyoming, gathered to honor him. During his year's leave of absence, he and Mrs. Vaughan toured the United States and Canada, and visited Cuba and Mexico. Travel gave the Vaughans great pleasure; in 1956, they sailed to South America and toured the Virgin Islands, Rio de Janeiro, Santos, Montevideo, Buenos Aires, and Curacao in the Netherlands West

Indies. They then visited in the Panama Canal Zone and flew home.

A long time member of the Texas Medical Association through the Lampasas-Burnet-Llano Counties Medical Society, he served as president of that group in 1939, 1944, and 1947, and was a past president of the Chamber of Commerce. He also was a member of the American Medical Association, Lions Club, Bertram Water Board, Austin Area Girl Scout Board, Presbyterian Church, American Legion, and Masonic Lodge. He was on the local school board for about 20 years, was director of the Bertram Hospital Board and Burnet County Fair.

Dr. Vaughan was the first Burnet County man to go away to college and play college football; he also was a star player on Bertram's semi-professional baseball team during the early 1920's.

Survivors include Mrs. Vaughan (the former Miss Frances Campbell); one son, Thomas Doak Vaughan, Tulsa; and two sisters, Mrs. Tom Taylor, Bertram, and Mrs. C. R. Patton, Higgins; and two grandchildren.

DR. W. F. McCREIGHT

Dr. William F. McCreight died at his home in Kirbyville, Texas, July 30, 1961. He had suffered a serious heart attack in 1959, but had refused to retire and continued seeing his patients and going to his office every day.

Dr. McCreight, the oldest of 14 children, was born in Quitman, Texas, August 29, 1885. After completing his work in the public schools, Dr. McCreight attended East Texas Normal College in Commerce, then taught and borrowed money to finance his way through medical school. He was graduated from the University of Texas Medical Branch, Galveston, in 1912, and began his practice in Kirbyville, Texas, as a physician for the Kirby Lumber Company. He planned to gain a few years' experience there before settling elsewhere, but he remained to serve nearly half a century as a family doctor.

His first calls were made astride a big bay horse; later, he invested in a small buggy, and since 1916, when he bought his first car, he had used almost every mode of conveyance to reach his patients. He had a reputation for "getting to his patients in a hurry," and citizens of the area gave him plenty of room when they saw him coming.

Once he was called to see a desperately ill man in a nearby sawmill town. Rains had made the roads impassable. As Dr. McCreight was trying to make "horse and mule" connections, a barnstorming pilot landed a light plane in a cow pasture nearby, and Dr. McCreight climbed aboard for his first and last plane ride.

His fame as a diagnostician was wide; he was among the first to discover and treat typhus fever in his area. He also liked to recall that during the first influenza epidemic, he lost only one patient.

An organizer of the Jasper-Newton Counties Medical Society, Dr. McCreight had served five terms as president. He was elected to honorary membership in the Texas Medical Association in 1956. He also was a member of the American Medical Association, Kirbyville Lions Club, Masonic Lodge, and the First Baptist Church. He was a director of the Kirbyville State Bank.

In 1952, citizens of Kirbyville and the surrounding area paid tribute to Dr. McCreight for his 40 years of service to the community. In addition to his medical and civic services, during both World Wars and the Korean Conflict, the doctor had taken it upon himself to deliver any death messages to families of men killed in service.

In September, 1912, Miss Inez Scarborough and Dr. McCreight were married. She died in February, 1960. Survivors include a son, William F. McCreight, Kirbyville; two daughters, Mrs. Kathleene Matthews, Channelview, and Mrs. Wanda Brown, Crockett; his step-mother, Mrs. Irene McCreight, Tyler; four brothers, Artemus McCreight, Longview; Arthur McCreight, Quitman; Jim McCreight, Yantis; and Newton McCreight, Sulphur Springs; five sisters, Mrs. Ola White, Quitman; Mrs. Babe Caldwell, San Angelo; Mrs. Alma Ross, Brownfield; Mrs. Louella Shelby, Longview; and Mrs. Imogene Fitzgerald, Tyler; and six grandchildren.

DR. W. L. GARLAND

Dr. Wiley L. Garland, physician, banker, and civic and religious leader died at his home in Grand Saline April 30, 1961. He had been ill for several months.

He was born in Rabun Gap, Ga., on December 5, 1878, and attended public schools in Clayton, Ga. Dr. Garland was graduated from Judson College, Marion, Ala., and attended the University of Richmond, Richmond, Va. He was awarded a doctor of medicine degree from the University of Nashville Medical Department in 1901. He practiced in Tyler, Foard, Lubbock, and Grand Valley before settling in 1922 in Grand Saline, where he remained active until recent months when ill health forced him to retire. He was chairman of the board of directors of the First National Bank at the time of his death, and was a member of the board of deacons of the Main Street Baptist Church, and formerly had been chairman.

Active in medical affairs, Dr. Garland was city health officer for many years, and had been president

of Van Zandt County Medical Society in 1946 and 1952. He also was a member of the Texas and American Medical Associations.

Widely known for his private charities, he never publicized or discussed them.

Until he sold his interest a year ago, he was part owner of the City Pharmacy.

Survivors include his widow, Mrs. Eulah Garland; a son, Wiley Garland, Grand Saline, and a grandson, Wiley Garland III of Dallas.

★ Coming Meetings

American Medical Association, Clinical Meeting, Denver, Nov. 27-30, 1961. Dr. F. J. L. Blasingame, 535 N. Dearborn, Chicago 10, Exec. Vice-Pres.

Texas Medical Association, Austin, May 12-15, 1962. C. L. Williston, 1801 N. Lamar, Austin, Exec. Sec.

Current Meetings

SEPTEMBER

American Hospital Association, Sept. 25-28, 1961. Mr. M. J. Norby, 840 North Lake Shore Dr., Chicago 11, Sec.

American Society of Clinical Pathologists, Seattle, Sept. 30-Oct. 8, 1961. Miss Eleanor F. Larson, 445 Lake Shore Drive, Chicago 11, Mgr.

Southwest Regional Cancer Conference, Fort Worth, Sept. 24, 1961. Mrs. I. F. Ball, Westchester House, Fort Worth, Sec.

Texas Chapter, American Academy of Pediatrics, Harlingen, Sept. 22, 1961. Dr. W. W. Kelton, Jr., 108 W. 30th, Austin, Sec.

Texas Heart Association, Houston, Sept. 15-17, 1961. Mr. E. T. Guy, 404 Jesse H. Jones Library Bldg., Houston 25, Exec. Dir.

Texas Pediatric Society, Harlingen, Sept. 22-23, 1961. Dr. C. E. Gilmore, 811 Bonham, Paris, Sec.

OCTOBER

American Academy of Ophthalmology and Otolaryngology, Chicago, Oct. 8-13, 1961. Dr. W. L. Benedict, 15 2nd St. S.W., Rochester, Minn., Sec.

American Academy of Pediatrics, Chicago, Oct. 2-5, 1961; New York, April 30-May 2, 1962. Dr. E. H. Christopherson, 1801 Hinman, Evanston, Ill., Exec. Dir.

American Cancer Society, New York, Oct. 23-24, 1961. Mr. G. Whittlesey, 521 W. 57th, New York 19, Sec.

American College of Gastroenterology, Cleveland, Oct. 22-25, 1961. Mr. D. Weiss, 33 W. 60th, New York 23, Exec. Dir.

American College of Surgeons, Chicago, Oct. 2-6, 1961. Dr. W. E. Adams, 40 East Erie, Chicago, Sec.

American Heart Association, Miami Beach, Oct. 20-24, 1961. Mr. W. F. McGlone, 44 E. 23rd, New York 10, Sec.

American Society of Anesthesiologists, Los Angeles, Oct. 22-27, 1961. Mr. J. W. Andes, 515 Busse Highway, Park Ridge, Ill., Exec. Sec.

Association of American Physicians and Surgeons, Inc., Asheville, N. C., Oct. 12-14, 1961. Mr. H. E. Northam, 185 N. Wabash, Chicago 1, Exec. Dir.

Southern Psychiatric Association, New Orleans, Oct. 1-3, 1961. Dr. R. Proctor, Winston-Salem, N. C., Sec.

Southwestern Medical Association, Las Vegas, Oct. 19-21, 1961. Dr. M. Thomas, 1501 Arizona, El Paso, Sec.

Texas Academy of General Practice, Houston, Oct. 15-18, 1961. Mr. D. C. Jackson, 1905 N. Lamar, Austin, Exec. Sec.

Texas Surgical Society, Waco., Oct. 1-3, 1961. Dr. G. V. Brindley, Jr., Scott and White Clinic, Temple, Sec.

Oklahoma City Clinical Conference, Oklahoma City, Oct. 23-25, 1961. Miss Alma F. O'Donnell, 503 Medical Arts Bldg., Oklahoma City 2, Exec. Sec.

Texas State Board of Examiners in Basic Sciences, Austin, Mid-October, 1961. Mrs. Maria P. Hathaway, Exec. Sec., 1012 State Office Bldg., Austin.

National and Regional

American Academy of Allergy, Denver, Feb. 5-7, 1962. Mr. J. O. Kelley, 756 N. Milwaukee St., Milwaukee 2, Exec. Sec.

American Academy of Dermatology and Syphilology, Chicago, Dec. 2-7, 1961. Dr. R. R. Kierland, Mayo Clinic, Rochester, Sec.

American Academy of General Practice, Las Vegas, April 6-13, 1962. Mr. M. F. Cahal, Volker Blvd., at Brookside, Kansas City 12, Exec. Sec.

American Association of Genito-Urinary Surgeons, Skytop, Penn., May 9-11, 1962. Dr. W. J. Engel, 2020 E. 93rd, Cleveland 6, Sec.

American Association of Obstetricians and Gynecologists. Dr. C. L. Randall, 216 Summer, Buffalo 22, Sec.

American Association of Plastic Surgeons, Del Monte, Calif., May 6-10, 1962. Dr. T. D. Cronin, 6615 Travis, Houston 25, Sec.

American Association for Thoracic Surgery, St. Louis, April 16-18, 1962. Dr. H. T. Bahnson, Johns Hopkins Hosp., Baltimore 5, Sec.

American College of Allergists, Minneapolis, April 1-6, 1962. Mr. E. Bauers, 2160 Rand Tower, Minneapolis, Exec. Vice-Pres.

American College of Chest Physicians, Denver, Nov. 25-27, 1961. Mr. M. Kornfeld, 112 E. Chestnut, Chicago 11, Exec. Dir.

American College of Obstetricians and Gynecologists, Chicago, April 2-5, 1962. Mr. D. F. Richardson, 79 W. Monroe, Chicago 3, Exec. Sec.

American College of Physicians, Philadelphia, April 9-13, 1962. Dr. E. C. Rosenow, Jr., 4200 Pine, Philadelphia 4, Exec. Dir.

American College of Radiology, New York, Feb. 7-10, 1962. Mr. W. C. Stronach, 20 N. Wacker, Chicago 6, Exec. Dir.

American Congress of Physical Medicine and Rehabilitation, Cleveland, Aug. 27-Sept. 1, 1961. Dorothea C. Augustin, 30 N. Michigan, Chicago 2, Exec. Sec.

American Dermatological Association, Chandler, Ariz., March 28-31, 1962. Dr. C. T. Nelson, 630 West 168th, New York 32, Sec.

American Gynecological Society, Hot Springs, Va., May 31-June 2, 1962. Dr. C. J. Lund, 260 Crittenden Blvd., Rochester 20, N. Y.

American Neurological Association, Atlantic City, June 18-20, 1962. Dr. M. D. Yahr, 710 W. 168th, New York 32, Sec.

American Proctologic Society, Miami, Fla., April 30-May 3, 1962. Dr. N. D. Nigro, 7815 East Jefferson, Detroit 1, Sec.

American Public Health Association, Detroit, Nov. 13-17, 1961. Dr. B. F. Mattison, 1790 Broadway, New York 19, Exec. Sec.

American Surgical Association. Dr. W. Altemeier, Cincinnati General Hospital, Cincinnati 29, Sec.

International College of Surgeons, U. S. Chapter. Dr. R. T. McIntire, 1516 Lake Shore Dr., Chicago, Exec. Dir.

Radiological Society of North America, Chicago, Nov. 26-Dec. 1, 1961. Mr. M. D. Frazer, 3145 O Street, Lincoln, Neb., Sec.

South Central Association of Blood Banks, Fort Worth, 1962. L. R. Guy, Ph.D., 2927 Maple, Dallas 4, Sec.

Southern Medical Association, Dallas, Nov. 6-9, 1961. Mr. R. F. Butts, 2601 Highland, Birmingham 5, Exec. Sec.

Southern Surgical Association, Hot Springs, Va., Dec. 5-7, 1961. Dr. J. D. Martin, Jr., Emory U., Atlanta 22, Ga., Sec.

Southwest Allergy Forum, Memphis, April 14-17, 1962. Dr. D. Goltmann, Lebenheur Children's Hospital, 848 Adams Avenue, Memphis, Tenn.

Southwestern Society of Nuclear Medicine. Dr. J. R. Maxfield, Jr., 2711 Oak Lawn, Dallas, Sec.

Southwestern Surgical Congress, Albuquerque, N. Mex., April 2-5, 1962. Dr. R. B. Howard, 544 Pasteur Bldg., Oklahoma City 3, Okla.

Tri-State Medical Assembly. Dr. J. W. Wilson, Jr., 940 Margaret Place, Shreveport, Sec.

United States-Mexico Border Public Health Association. Dr. U. Blanco, El Paso, Sec.

State

Texas Academy of Internal Medicine, Houston, Dec. 2-3, 1961. Dr. S. C. Arnett, Jr., 2609 19th, Lubbock, Sec.
Texas Air-Medics Association, Austin, 1962. Dr. C. F. Miller, Box 1338, Waco, Sec.
Texas Association for Mental Health. Mrs. L. Marcus, 3525 Arrowhead, Dallas, Sec.
Texas Association of Obstetricians and Gynecologists, Dallas, February, 1962. Dr. H. W. Savage, 815 Fifth Ave., Ft. Worth, Sec.
Texas Association of Public Health Physicians. Dr. Elizabeth Gentry, 1313 Sabine, Austin, Sec.
Texas Chapter, American College of Chest Physicians, Austin, May 13, 1962. Dr. Donald L. Paulson, 3710 Swiss Ave., Dallas.
Texas Club of Internists. Dr. T. H. Harvill, Medical Arts Bldg., Dallas 1, Sec.
Texas Dermatological Society, Dallas, Nov. 5, 1961. Dr. D. S. Blair, 1609 Medical Arts Bldg., Dallas, Sec.
Texas Diabetes Association, Austin, May 13, 1962. Dr. John W. Chriss, 2436 Morgan, Corpus Christi, Sec.
Texas Division, American Cancer Society, Fort Worth, Dec. 7-8, 1961. Mr. C. W. Reimann, 5014 Bull Creek Rd., Austin 3, Exec. Sec.
Texas Industrial Medical Association, Austin, May 13, 1962. Dr. R. E. Joyner, Box 471, Texas City, Sec.
Texas Neuropsychiatric Association, Austin, May 12, 1962. Dr. E. I. Bruce, Jr., 1014 Strand, Galveston, Sec.
Texas Ophthalmological Association, Austin, May 14-15, 1962. Dr. Harold Hunt, 150 Eighth St., S.E., Paris, Sec.
Texas Orthopedic Association, Austin, May 14, 1962. Dr. Margaret Watkins, 3503 Fairmount, Dallas, Sec.
Texas Otolaryngological Association. Dr. Louis E. Adin, Jr., 3707 Gaston, Dallas, Sec.
Texas Physical Medicine and Rehabilitation Society. Dr. O. Selke, Medical Professional Bldg., Houston, Sec.
Texas Proctologic Society, San Antonio, Feb. 15, 1962. Dr. T. Melton, 636 Hermann Professional Bldg., Houston, Sec.
Texas Public Health Association, Houston, Feb. 11-14, 1962. J. N. Murphy, Jr., P. O. Box 5192, Austin 31, Sec.
Texas Radiological Society, Austin, Jan. 19-20, 1962. Dr. R. P. O'Bannon, 1217 W. Cannon, Ft. Worth, Sec.
Texas Rheumatism Association, Houston, Dec. 1, 1961. Dr. J. Kemper, 6655 Travis, Houston, Sec.
Texas Society of Anesthesiologists, Austin, May 12, 1962. Dr. E. L. Slataper, Medical Towers, Houston, Sec.
Texas Society of Athletic Team Physicians, Austin, April, 1962. Dr. L. Levy, Ft. Worth, Sec.
Texas Society on Aging, San Antonio, Dec. 1-2, 1961. Mrs. W. B. Ruggles, 3701 Stratford, Dallas, Sec.
Texas Society of Gastroenterologists and Proctologists, Austin, May, 1962. Dr. Belton Griffin, 6648 Fannin, Houston, Sec.
Texas Society of Ophthalmology and Otolaryngology. Dr. O. Suehs, 14 Medical Arts Square, Austin, Sec.
Texas Society of Pathologists, Inc., Galveston, last week of Jan., 1962. Dr. V. A. Stembridge, Southwestern Medical School, Dallas, Sec.
Texas Society of Plastic Surgeons, Corpus Christi, May 11-12, 1962. Dr. R. O. Brauer, 6615 Travis, Houston, Sec.
Texas Traumatic Surgical Society, Austin, May 13, 1962. Dr. J. C. Long, 805 W. 8th, Plainview, Sec.
Texas Tuberculosis Association, El Paso, March 29-31, 1962. Mrs. J. R. Walton, Jr., 1407 Andrews Hwy., Midland, Sec.
Texas Urological Society, Houston, February, 1962. Dr. N. F. McDonald, 915 Medical Arts Bldg., Houston 15, Sec.

District

First District Society, Pecos, February, 1962. Dr. G. L. Black, 1501 Arizona, El Paso, Sec.
Second District Society. Dr. Broadway Broadrick, Box 111, Big Spring, Sec.
Third District Society, Pampa, Sept., 1962. Dr. H. F. Johnson, 2308 W. 8th, Amarillo, Sec.
Fifth and Sixth Districts Society. Dr. S. H. Ware, Jr., 3154 Reid Drive, Corpus Christi, Sec.
Seventh District Society. Dr. R. Lucas, 502 W. 13th, Austin, Sec.
Eighth District Society. Dr. H. Davis, 120 Barracuda, Galveston, Sec.
Ninth District Society.
Tenth District Society. Dr. I. M. Richman, 3280 Fannin, Beaumont, Sec.
Eleventh District Society. Tyler, Spring, 1962. Dr. F. Verheyden, 400 S. Ragsdale, Jacksonville, Sec.
Twelfth District Society, Temple, Jan. 13, 1962. Dr. J. Dunlap, 2320 Columbus, Waco, Sec.
Thirteenth District Society. Dr. R. D. Moreton, 1217 W. Cannon, Ft. Worth, Sec.
Fourteenth District Society.
Fifteenth District Society. Dr. J. S. Leeves, Naples, Sec.

Clinics

Blackford Memorial Cancer Lectures, Denison, Nov. 2, 1961. Dr. A. O. Jensen, Suite N-1, Medical Center, Denison, Chm.
Dallas Southern Clinical Society Conference, Dallas, March 19-21, 1962. Dr. C. M. Cole, 1421 Medical Arts Bldg., Dallas, Sec.
International Medical Assembly of Southwest Texas, San Antonio, Jan. 29-31, 1962. S. E. Cockrell, Jr., 202 W. French Place, San Antonio, Exec. Sec.
New Orleans Graduate Medical Assembly, New Orleans, March 12-15, 1962. Dr. Mannie D. Paine, Jr., 1430 Tulane Ave., New Orleans 12, Exec. Sec.
North Texas-Southern Oklahoma Fall Clinical Conference. Dr. F. J. Lee, 1300 8th, Wichita Falls, Chm.
Postgraduate Medical Assembly of South Texas. Mrs. W. H. Dahme, 412 Jesse H. Jones Library Bldg., Houston 25, Exec. Sec.
Private Clinics and Hospitals, Houston, Dec. 2-3, 1961. Mr. B. J. Warren, Deaton Hospital, Galena Park, Sec.

Board Examinations

Texas State Board of Medical Examiners, Fort Worth, Nov. 30-Dec. 2, 1961. Dr. M. H. Crabb, 1714 Medical Arts Bldg., Fort Worth, Sec.